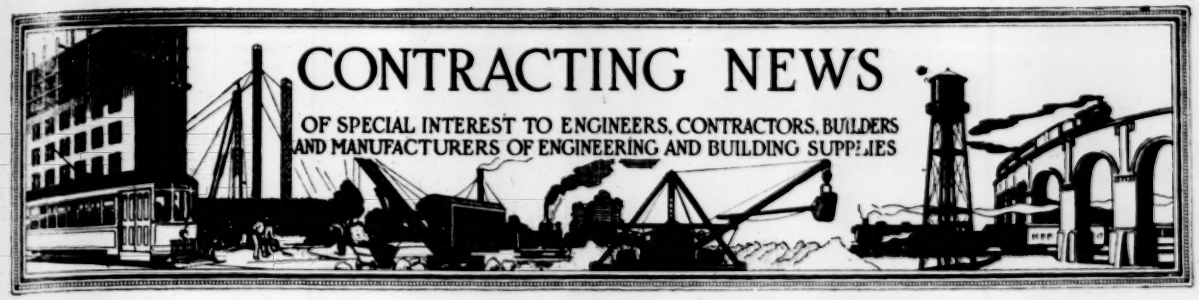
CONTRACTING NEWS
OF SPECIAL INTEREST TO ENGINEERS, CONTRACTORS, BUILDERS
AND MANUFACTURERS OF ENGINEERING AND BUILDING SUPPLIES

Price advances are indicated **by heavy type**; declines by *italics*.

IRON AND STEEL

PIG IRON—Below are the present quotations, with a comparison of a month and a year ago:

CINCINNATI	June 4, 1917	One Month Ago	One Year Ago
No. 2 Southern foundry	**$42.90**	$37.90	$17.90@18.40
No. 2 Northern foundry	**43.00**	....	20.26
NEW YORK			
No. 2X Northern foundry	**45.75@46.25**	41.50	20.50@20.70
No. 2 plain Northern foundry	**45.25@45.75**	....	20.25@20.50
No. 2 Southern foundry†	**44.25**	....	20.25@20.50
BIRMINGHAM			
No. 2 Southern foundry	**39.00@41.00**	35.00	15.00
CHICAGO			
No. 2 Northern foundry	**46.00**	41.00	19.00
PITTSBURGH			
Bessemer iron*	**45.95**	42.95	21.85
Basic iron*	**42.00**	40.00	18.95

*These prices include the freight charge from the valley to the Pittsburgh district. †Delivered Tidewater, New York.

PIPE—The following discounts are for carload lots f.o.b. Pittsburgh, in effect May 1, 1917:

BUTT WELD

Steel Inches	Black	Galvanized	Iron Inches	Black	Galvanized
¾ to 3	49%	35½%	¾ to 1½	38%	22%

LAP WELD

2	42%	29½%	1¼	23%	8%
2½ to 6	45%	32½%	1½	30%	16%
7 to 12	42%	28½%	2	31%	17%
13 and 14	32½%	....	2½ to 4	33%	20%
15	30%	....	4½ to 6	33%	20%
			7 to 12	32%	19%

BUTT WELD, EXTRA STRONG PLAIN ENDS

¾ to 1½	47%	34½%	¾ to 1½	38%	23%
2 to 3	48%	35½%			

LAP WELD, EXTRA STRONG PLAIN ENDS

2	40%	28½%	1¼	24%	9%
2¼ to 4	43%	31½%	1½	30%	16%
4½ to 6	42%	30½%	2	32%	19%
7 to 8	38%	24½%	2½ to 4	34%	22%
9 to 12	33%	19½%	4½ to 6	33%	21%
			7 to 8	27%	15%
			9 to 12	22%	10%

From warehouses at the places named the following discounts hold for steel pipe:

	Black		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	44%	42.8%	41.27%
3½ to 6 in. lap welded	28%	38.8%	37.27%
7 to 12 in. lap welded	....	35.8%	34.27%

	Galvanized		
	New York	Chicago	St. Louis
¾ to 3 in. butt welded	28%	27.8%	26.27%
3½ to 6 in. lap welded	10%	24.8%	22.27%
7 to 12 in. lap welded	....	20.8%	19.27%

Malleable fittings, Class B and C, from New York stock sell at 5 and 5% from list prices. Cast iron, standard sizes, 34 and 5%.

BARS, CONCRETE REINFORCING—The following quotations are per 100 lb.:

ROLLED FROM BILLETS

In.	Mill Shipment*	Warehouse New York June 4, 1917	Warehouse New York One Month Ago	Warehouse St. Louis	Warehouse Chicago	Warehouse San Francisco
¾ and larger	....	**$4.85**	$4.60	**$3.986**	**$4.50**	**$5.50**
⅝	....	**4.95**	4.70	**4.036**	**4.55**	**5.55**
½	....	**5.05**	4.80	**4.086**	**4.60**	**5.60**
⅜	....	**5.20**	4.95	**4.236**	**4.75**	**5.75**
¼	....	**5.55**	5.30	**4.486**	**5.00**	**6.06**

*Mill quotations can be obtained only on actual specifications.

ROLLED FROM RAILS

	St. Louis	Dallas		St. Louis	Dallas
¾ in. and larger	**$3.50**	**$4.50**	⅝	**$3.75**	**$4.75**
⅝	3.55	4.55	¼	4.50	5.00
½	3.60	4.60			

RIVETS—The following quotations are per 100 lb.:

STRUCTURAL

	Mill Pittsburgh	Warehouse New York	Chicago	St. Louis	San Francisco
¾ in. and larger	**$4.75**	**$6.50**	**$5.00**	**$5.05**	**$6.65**

CONE HEAD BOILER

¾ in. and larger	4.85	6.60	5.10	5.15	**6.75**
⅝ and ½	5.00	6.75	5.25	5.30	**6.90**
½ and ⅜	5.35	7.10	5.60	5.65	**7.25**

Lengths **shorter than 1 in. take an extra of 50c. Lengths between 1 in. and 2 in. take an extra of 25c.**

SHEETS—Quotations are in cents per pound in various cities from warehouse, also the base quotation from mill:

Blue Annealed	Large Lots Pittsburgh	St. Louis	Chicago	San Francisco	New York June 4, 1917	New York One Mo. Ago
No. 10	7.25	7.55	**8.00**	**9.50**	**9.00**	6.80
No. 12	7.50	7.60	**8.05**	**9.55**	**9.05**	6.85
No. 14	7.75	7.65	**8.10**	**9.60**	**9.10**	6.90
Black						
Nos. 18 and 20	7.30	7.85	7.80	**9.57**	**9.30**	7.30
Nos. 22 and 24	7.35	7.70	7.85	**9.60**	**9.35**	7.35
No. 26	7.40	7.75	7.90	**9.65**	**9.40**	7.40
No. 27	7.45	7.80	7.95	**9.70**	**9.45**	7.45
No. 28	7.50	7.85	**8.00**	**9.75**	**9.50**	7.50
Galvanized						
No. 10	**8.50**	Premium	**9.20**	....	**10.95**	8.45
No. 12	**8.55**	Premium	**9.20**	**11.68**	**11.00**	8.50
No. 14	**8.60**	Premium	**9.20**	**11.68**	**11.05**	8.55
Nos. 18 and 20	**8.90**	Premium	**9.40**	**11.98**	**11.35**	8.85
Nos. 22 and 24	**9.05**	Premium	**9.55**	**10.12**	**11.55**	9.05
No. 26	**9.20**	Premium	**9.70**	**10.27**	**11.70**	9.20
No. 27	**9.35**	Premium	**9.85**	**10.42**	**11.85**	9.35
No. 28	**9.50**	Premium	**10.00**	**10.56**	**12.00**	9.50

STEEL RAILS—The following quotations are per ton f.o.b. Pittsburgh and Chicago for carload or larger lots. For less than carload lots 5c. per 100 lb. is charged extra:

	Pittsburgh June 4, 1917	Pittsburgh One Month Ago	Chicago June 4, 1917	Chicago One Month Ago
Standard bessemer rails	**$38.00**	**$38.00**	**$38.00**	**$38.00**
Standard openhearth rails	40.00	40.00	40.00	40.00
Light rails, 8 to 10 lb.	**63.00**	58.00	**63.00**	58.00
Light rails, 12 to 14 lb.	**62.00**	57.00	**62.00**	57.00
Light rails, 25 to 45 lb.	**60.00**	55.00	**60.00**	55.00

TRACK SUPPLIES—The following prices are base per 100 lb. f.o.b. Pittsburgh for carload lots, together with the warehouse prices at the places named:

	Pittsburgh June 4, 1917	Pittsburgh One Year Ago	Chicago	St. Louis	San Francisco
Standard railroad spikes	**$3.85**	$2.65	**$5.00**	**$5.05**	**$5.00**
Track bolts	**6.00**	3.25	**6.25**	**5.75**	**6.25**
Standard section angle bars	3.50	2.00	**4.00**	....	**6.50**

NAILS—The following quotations are per keg from warehouse:

	New York June 4, 1917	New York One Year Ago	St. Louis	Chicago	San Francisco
Wire	**$4.10**	$3.15	**$4.00**	**$4.00**	**$4.60**
Cut	4.40	3.15	4.00	**4.50**	5.65

STRUCTURAL MATERIAL—The following are the base prices f.o.b. mill, Pittsburgh, together with the quotations per 100 lb. from warehouses at the places named:

	Pittsburgh	New York June 4, 1917	New York One Yr. Ago	St. Louis	Chicago	San Francisco
Beams, 3 to 15 in.	**$5.00**	**$5.00**	**$3.50**	**$5.05**	**$5.00**	**$6.50**
Channels, 3 to 15 in.	**5.00**	**5.00**	3.55	**5.05**	**5.00**	**6.50**
Angles, 3 to 6 in., ¼ in. thick	**5.00**	**5.00**	3.50	**5.05**	**5.00**	**6.50**
Tees, 3 in. and larger	**5.05**	**5.05**	3.55	**5.05**	**5.05**	**6.50**
Plates	**7.00**	**8.00**	4.10	**6.55**	**7.00**	**8.50**

New York extras on other shapes and sizes per lb. are as follows:

I-beams over 15 in.	$0.10
Angles over 6 in., on one or both legs	.10
Angles, 3 in., on one or both legs, less than ¼ in. thick	.70
Cutting to lengths, under 3 ft. to 2 ft. inclusive	.25
Cutting to lengths, under 2 ft. to 1 ft. inclusive	.50
Cutting to lengths, under 1 ft.	1.55

No charge is made for cutting to lengths 3 ft. and over.

WIRE ROPE—Discounts from list price on regular grades of bright and galvanized are as follows:

	New York June 4, 1917	New York 1 Yr. Ago	St. Louis	Chicago	San Francisco
Galvanized	**10-2½%**	25-2½%	**5-2½%**	**10-2½%**	5%
Bright	**20-2½%**	35-2½%	**15-2½%**	**20-2½%**	15%

EXPANDED METAL LATH—Prices per 100 yd. for painted are as follows:

Gage	Weight	New York Carload	New York Less Than Carload	Carload Chicago*	Carload St. Louis	Carload San Francisco	Carload Dallas
27	233	**$31.00**	**$31.18**	**$28.00**	**$30.00**	**$29.00**	**$26.50**
26	250	**32.03**	**32.11**	**29.00**	**32.00**	**30.25**	....
25	300	**33.13**	**33.22**	**30.00**	....	....	....
24	340	**34.25**	**34.36**	**31.00**	**35.00**	**33.00**	**30.50**
22	450	**36.44**	**36.58**	**33.00**	....	....	....

*About 10 additional for smaller quantities.

STEEL SHEET PILING—The following price is base per 100 lb. f.o.b. Pittsburgh, with a comparison of a month and a year ago:

June 4, 1917	One Month Ago	One Year Ago
$3.60 @ 4.00	$3.60 @ 4.00	$2.50

CAST-IRON PIPE—The following are prices per net ton for carload lots:

	New York June 4, 1917	New York One Year Ago	Birmingham	Chicago	St. Louis	San Francisco
4 in.	$58.50	$34.00	$53.00	$58.50	$57.00	$66.00
6 in. and over	55.50	31.00	50.00	55.50	54.00	63.00

Gas pipe and 16-ft. lengths are $1 per ton extra.

OLD MATERIAL—The prices following are per gross ton paid to dealers and producers in New York. In Chicago and vicinity, the quotations are per net ton and cover delivery at the buyer's works, including freight transfer charges:

	New York June 4, 1917	New York One Month Ago
Heavy melting steel scrap	$23.00 @ 23.50	$21.50
No. 1 railroad wrought	40.50 @ 41.50	38.00
Stove plate	17.50 @ 18.00	16.50
No. 1 machinery cast	29.00 @ 30.00	24.50
Machine shop turnings	12.50 @ 13.00	11.50
Cast borings	13.50 @ 14.00	13.50
Railroad malleable cast	24.00 @ 24.50	22.50

	Chicago June 4, 1917	Chicago One Month Ago
No. 1 railroad wrought	$36.00 @ 37.00	$32.00
Stove plate	18.00 @ 19.00	14.50
No. 1 machinery cast	26.00 @ 27.00	21.50
Machine shop turnings	11.50 @ 15.00	10.50
Cast borings	14.00 @ 14.50	11.00
Railroad malleable cast	26.50 @ 27.00	21.50

TRIANGLE MESH REINFORCEMENT—Price per 100 sq.ft. in carload lots:

PLAIN 4-IN. x 4-IN. MESH

Style Number	Sectional Area Square Inches per Foot Width	Pittsburgh	New York	Chicago	St. Louis	Dallas	San Francisco
032	0.032	$0.89	$0.92	$0.93	$0.94	$1.06	$1.20
049	0.049	1.13	1.18	1.18	1.20	1.34	1.55
068	0.068	1.42	1.47	1.49	1.50	1.68	1.97
093	0.093	1.82	1.89	1.91	1.92	2.17	2.47
126	0.126	2.31	2.39	2.42	2.44	2.74	3.15
153	0.153	2.75	2.86	2.88	2.91	3.27	3.75
180	0.180	3.16	3.27	3.31	3.34	3.76	...
245	0.245	4.17	4.33	4.36	4.41	4.96	6.12
287	0.287	4.82	5.00	5.04	5.10	5.72	...
336	0.336	5.59	5.80	5.85	5.92	6.66	...
395	0.395	6.48	6.72	6.78	6.86	7.73	...

PLAIN 4-IN. x 8-IN. MESH

036P	0.036	.69	.71	.72	.73	.82	...
053P	0.053	.97	1.01	1.02	1.03	1.16	...
072P	0.072	1.26	1.30	1.32	1.33	1.50	...
097P	0.097	1.62	1.68	1.70	1.71	1.93	...
049R	0.049	.97	1.01	1.02	1.03	1.15	1.97
067R	0.067	1.26	1.30	1.32	1.33	1.50	...
089R	0.089	1.62	1.68	1.70	1.71	1.93	...

Made in 16-, 20-, 24-, 28-, 32-, 36-, 40-, 44-, 48-, 52- and 56-in. width in rolls 150-, 200- and 300-ft. lengths.
Galvanized runs about 10% higher than plain.

FREIGHT RATES—On finished steel products in the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized wire nails, rivets, spikes, bolts, flat sheets (except planished), chains, etc., the following freight rates are effective in cents per 100 lb.:

Baltimore	15.4	Minneapolis	32.9
Boston	18.9	New Orleans	30.7
Buffalo	11.6	New York	16.9
Chicago	18.9	Pacific Coast (all rail)	75.0
Cincinnati	15.8	Philadelphia	15.9
Cleveland	10.5	St. Louis	23.6
Denver	68.6	St. Paul	32.9
Kansas City	43.6		

CEMENT, BRICK AND STONE

PAVING STONE—

		June 4, 1917
New York	Manhattan	$2.50 sq.yd.
	Other boroughs	2.25 sq.yd.
Boston	5-in. granite	2.45 sq.yd.
Chicago	About 4x8x4 dressed	2.25 sq.yd.
	About 4x8x4 common	1.80 sq.yd.
St. Paul	Sandstone	1.65 sq.yd.
San Francisco	Basalt block 4x7x8	57.75 per M
Kansas City	Limestone	2.00 sq.yd.
Cincinnati	Granite	75.00 per M
New Orleans	Granite	60.00 per M

FLAGGING—

		June 4, 1917
New York	Bronx	$0.17 sq.ft.
	Manhattan	.17 sq.ft.
	Queens, 5 ft. square	.18 sq.ft.
Chicago	18 in. wide	.75 lin.ft.

CURBING—Prices per linear foot are as follows:

		June 4, 1917
New York	5 x 16	$0.40
	5 x 20	.45
Chicago	6 x 18	.60
St. Louis	5 x 16 square edge	.72
	5 x 16 bull nose	.76
San Francisco	5 x 16	.75
	5 x 20	.85

SAND AND GRAVEL—Price for cargo or carload lots is as follows, per cu.yd.:

	Paving	Gravel 1½ In. June 4, 1917	Gravel 1½ In. One Yr. Ago	Gravel ¾ In. June 4, 1917	Gravel ¾ In. One Yr. Ago	Sand June 4, 1917	Sand One Yr. Ago
New York	$1.25	$1.25	$0.90	$1.25	$1.00	$0.50	$0.50
Chicago	1.40	1.40	1.00	1.40	1.00	1.60	.85
St. Louis	...	1.08	.70	1.08	.70	1.08	.60
Dallas	...	1.50	...	1.50	...	1.50	...
San Francisco	...	1.00	.90	1.00	.90	1.00	1.00
Los Angeles	...	.85	...	.85	...	.35	...
New Orleans	...	1.95	...	1.95	...	1.30	...
Boston	...	1.50	...	1.55	...	.80	...
Kansas City	...	2.00	...	2.25	...	.60	...
Seattle	...	.75	...	.75	...	.75	...
Cincinnati*	...	.90*	...	.90*	...	.90*	...
St. Paul	...	1.00	...	1.10	...	.50	...

*Per ton.

Fine White Sand—St. Louis.
Pacific ..... $4.50 per ton Ottawa ..... $5.00 per ton

CRUSHED STONE—Price for cargo or carload lots is as follows, per cu.yd.:

	1½ In. June 4, 1917	1½ In. One Year Ago	¾ In. June 4, 1917	¾ In. One Year Ago
New York	$1.10	$0.85	$1.25	$0.95
Chicago	1.40	.95	1.40	.95
St. Louis	1.25	1.00	1.25	1.00
Dallas	1.42	...	...	...
San Francisco	1.00	1.25	1.00	1.25
Los Angeles	.95	...	1.00	...
Cincinnati	1.00	...	1.05	...
New Orleans	2.50	...	4.00	...
Boston	1.25	...	1.25	...
Kansas City	1.35	...	1.45	...
Seattle	1.50	...	1.50	...
St. Paul	.80	...	1.00	...

LIME—The following prices prevail from warehouse in cities named:

	Hydrated, per Ton Finished	Hydrated, per Ton Common	Eastern Lump—Per 300-Lb. Barrel Finished	Eastern Lump—Per 300-Lb. Barrel Common
New York	$16.50	$13.25	$1.85	$1.65
St. Louis	11.25	10.00	...	...
Chicago	15.00	12.00	...	...
Dallas	20.00	15.00	...	...
San Francisco	16.50	15.00	...	...

PORTLAND CEMENT—These prices are for barrels in carload lots, including bags:

	June 4, 1917	One Month Ago	One Year Ago
New York	$2.40	$2.40	$1.72
Jersey City	2.16	2.16	1.66
Boston	2.67	2.20	1.92
Chicago	2.31	2.16	1.81
Pittsburgh	2.31	2.16	1.85
Cleveland	2.44	2.29	1.94
Detroit	2.40	2.25	1.90
Indianapolis	2.44	2.29	1.94
Toledo	2.44	2.29	1.94
Milwaukee	2.43	2.28	1.93
Minneapolis	2.58	2.48	2.08
Duluth	2.51	2.41	1.96
Peoria	2.43	2.28	1.89
Cedar Rapids	2.54	2.39	2.00
Davenport	2.49	2.34	1.99
St. Louis	2.45	2.30	1.85
San Francisco	2.60	2.60	2.30
New Orleans	2.70	2.47	...
Seattle	2.60	2.50	...
Dallas	2.15	...	...
Los Angeles	2.40	2.30	...
Cincinnati	2.52	2.29	...
Kansas City	2.29	2.24	...

ROSENDALE NATURAL CEMENT—Price to dealers for 500 bbl. or over, f.o.b., including bags:
New York $1.15
30c. allowed for bags.

BRICK—The price per 1000 in cargo or carload lots is as follows:

	Common June 4, 1917	Common One Month Ago	Common One Year Ago	Paving Brick	Paving Block
New York	$10.25	$11.50	$8.25	$23.50	$33.00
Chicago	8.00	6.00	6.00	16.00	24.00
St. Louis, salmon	7.00	7.00	6.00	....	18.00
St. Louis, selected red	10.00	10.00	9.50	....	....
San Francisco	10.00	10.00	....	....	....
Dallas	8.10	8.10	....	22.00	33.50
Seattle	7.50	7.00	....	....	28.75
New Orleans	9.00	7.75	....	....	10.00
Kansas City	10.00	10.00	....	....	20.00
Los Angeles	7.50	7.50	....	....	28.00
Cincinnati	9.50	12.50	....	....	28.00
Boston	12.50	12.50	....	....	34.00
St. Paul	8.70	....	....	....	26.00

MISCELLANEOUS

RAILWAY TIES—For fair-size orders, the following prices per tie hold:

	Material	6 In. x 8 in. by 8 Ft.	7 In. x 9 in. by 8 Ft. 6 In.
New York	Yellow Pine	$1.06 @ 1.11	$1.15 @ 1.20
St. Louis	No. 1 White Oak	.65	.80
Chicago	White Oak	.82	.97
San Francisco	Green	.69	.95
San Francisco	Creosoted	1.15	1.55

MANILA ROPE—Price in coils per lb. in cities named, ¾ to 1½ in.:

Boston	$0.30	Los Angeles	$0.28½
Cincinnati	.29	Seattle	.28½
Kansas City	.28½	New York	.27½
New Orleans	.28	St. Paul	.30

CLAY DRAIN TILE—The following prices are per 1000 sq.ft.:

Size, In.	St. Louis	Chicago	San Francisco	Dallas
3	$18.40	$15.00	$24.50	$19.80
4	20.70	18.00	31.50	28.10
6	28.75	23.00	45.50	....
7	40.25	27.00	63.00	45.95
8	74.75	55.00	105.00	82.75

SEWER PIPE—The following prices are in cents per foot for carload lots:

Size, In.	New York June 4, 1917	New York One Year Ago	St. Louis	Chicago	San Francisco	Dallas
3	.111	.067	....	.075	.06	.096
4	.111	.067	....	.075	.08	.096
5	.1665	.108	....	.12	.10	.144
6	.1665	.108	.12	.12	.12	.144
8	.259	.148	.165	.175	.18	.2125
10	.3885	.216	.23	.2625	.27	.2975
12	.4995	.27	.33	.3375	.3375	.3825
15	.666	.364	.50	.45	....	.5525
18	.925	.516	.75	.625	.675	.7225
20	1.11	.607	.90	.75	.875	.85
22	1.48	.81	1.13	1.00	1.05	1.105
24	1.665	.875	1.28	1.125	1.25	1.275
27	2.47	1.58	1.30	....	....	....
30	2.736	1.93	1.70	....	....	....
33	3.60	2.50	2.25	....	....	....
36	4.10	2.80	2.50	....	....	....

Size, In.	Seattle	New Orleans	Kansas City	Cincinnati	Los Angeles	Boston	St. Paul
3	.075	.048	.100	.105	.055	.114	.084
5	.075	.075	.135	.1575	.090	.171	.126
8	.225	.1395	.180	.231	.160	.266	.175
12	.4125	.2635	.360	.459	.265	.513	.350
24	1.75	1.04	1.350	1.80	1.00	1.71	1.35
36	....	....	3.250	4.51	....	4.2025	2.74

HOLLOW TILE—Hollow building tile price per block in cents:

	New York	Chicago	St. Louis	San Francisco	Dallas
4x12x12	$0.0925	$0.079	$0.054	$0.07	$0.07
6x12x12	.1295	.118	.066	.95	.09
8x12x12	.15725	.137	.090	.12	.12
10x12x12	.185	.158	.150	.18	.15
12x12x12	.23125	.200	.180	.20	.18

	Seattle	Kansas City	Cincinnati	St. Paul	Los Angeles
4x12x12	.050	.050	.050	.052	.055
8x12x12	.090	.101¼	.100	.098	.100
12x12x12	.150	.142	.135	.130½	.165

EXPLOSIVES—Price per pound in small lots at cities named:

	Low Freezing 20%	Gelatin 40%	Gelatin 60%	Gelatin 80%
New York	....	$0.24½	$0.29½	....
Boston	....	....	.31¼	$0.35
Cincinnati	$0.18	.20½	.24¾	.37
Kansas City	.17	.23¼	.28¼	.31½
New Orleans	.18¼	....	.27¼	....
Los Angeles	.21	.27	.34	....
Seattle	.15½	.21¾	.26¾	.33
Chicago	.16¾	.23	.28	.34¼
St. Paul*	.17	.23¼	.28¼	.34½
St. Louis	.14¼	.20½	.25½	.31¾

*In ton lots.

ROAD OILS—Following are prices in tank cars 8000 gal. minimum f.o.b. place named:

New York, 40-50% asphalt	6½c. gal.
New York, 60-70% asphalt	6¼ c. gal.
New York, dust layer, 30%	6½ c. gal.
New York, binder	8c. gal.
St. Louis, asphalt	5c. gal.
Chicago, 15-20% asphalt	6½ c. gal.
Dallas, 40-50% asphalt	5½c. gal.
Dallas, 60-70% asphalt	7c. gal.
San Francisco, 75-95% asphalt	$1.83 bbl.

Barrel 42 bulk gal.

WOOD BLOCK PAVING—

	Size of Block	Treatment	Per Sq.Yd.
New York	3½	16	$2.00
New York	4	16	2.25
Chicago	4	16	1.85
Chicago	City specifications		2.10
St. Louis	3½	16	1.60
Seattle	4	16	1.35
Boston	4	20	1.92
Cincinnati	4	16	1.65
Kansas City	4	16	1.85
St. Paul	Minneapolis specifications		1.85

LINSEED OIL—These prices are per gallon:

	New York June 4, 1917	New York One Year Ago	Cleveland June 4, 1917	Cleveland One Year Ago	Chicago June 4, 1917	Chicago One Year Ago
Raw in barrels	$1.31	$0.73	$1.32	$0.75	$1.32	$0.78
5-gal. cans	1.41	.83	1.42	.85	1.37	.88

WHITE AND RED LEAD in 500-lb. lots sell as follows in cents per pound:

	Red June 4, 1917 Dry	Red June 4, 1917 In Oil	Red 1 Year Ago Dry	Red 1 Year Ago In Oil	White June 4, 1917 Dry and In Oil	White 1 Yr. Ago Dry and In Oil
100-lb. keg	12.25	12.50	10.50	11.00	12.00	10.50
25- and 50-lb. kegs	12.50	12.75	10.75	11.25	12.25	10.75
12½-lb. keg	12.75	13.00	11.00	11.50	12.50	11.00
1- to 5-lb. cans	14.25	14.50	12.50	12.50	13.50	12.50

ROOFING MATERIALS—Prices per ton f.o.b. New York or Chicago:

	Carload Lots	Less Than Carload Lots
Tar felt (14 lb. per square of 100 sq.ft.)	$59.00	$60.00
Tar pitch (in 400-lb. bbl.)	14.00	16.00
Asphalt pitch (in barrels)	29.00	30.00
Asphalt felt	60.00	61.00

PREPARED ROOFINGS—Standard grade rubbered surface, complete with nails and cement, costs per square as follows in New York and Chicago:

	1-Ply c.l.	1-Ply l.c.l.	2-Ply c.l.	2-Ply l.c.l.	3-Ply c.l.	3-Ply l.c.l.
No. 1 grade	$1.15	$1.30	$1.45	$1.60	$1.75	$1.90
No. 2 grade	1.00	1.15	1.25	1.40	1.50	1.65

Asbestos asphalt-saturated felt (14 lb. per square) costs $5.35 per 100 lb.

Slate-surfaced roofing (red and green) in rolls of 108 sq.ft. costs $1.85 per roll in carload lots and $2.10 for smaller quantities.

Shingles, red and green slate finish, cost $4.75 per square in carloads, $5 in smaller quantities, in Philadelphia.

LUMBER—Price per M in carload lots:

Timbers 5 x 5 Square Edge and Sound Green

	Southern Pine New York 20 Ft. and Under	Southern Pine New York 22 Ft. and 24 Ft.	Southern Pine Chicago 20 Ft. and Under	Southern Pine Chicago 22 Ft. and 24 Ft.	Yellow Pine St. Louis 20 Ft. and Under	Yellow Pine St. Louis 22 Ft. and 24 Ft.
3x 4 to 8x 8	$35.75	$36.75	$33.75	$34.75	$21.00	$22.00
3x10 to 10x10	36.75	37.75	34.75	35.75	22.00	24.00
3x12 to 12x12	39.75	40.75	37.75	38.75	24.50	25.50
3x14 to 14x14	41.75	42.75	39.75	40.75	25.00	26.00
3x16 to 16x16	44.75	45.75	42.75	43.75	27.00	28.00
3x18 to 18x18	51.75	52.75	49.75	50.75	29.00	30.00
4x20 to 20x20	56.75	57.75	54.75	55.75	33.00	34.00

Over 32 ft.—Add $1 for each additional 2 ft. in length up to 40 ft. for sixes 12 x 12 and under; for sizes over 12 x 12 add $2. For merchantable add $2 to sizes 10 x 10 and under. For prime add $2 to the price of merchantable for all sizes.

Prices from Lumberman's Bureau.

Yellow Pine—Dallas. Price per M:

	No. 1 Common		
2x 4—22 ft. to 24 ft.	$37.50	4x4, 4x6, 6x6	$37.50
2x 6—22 ft. to 24 ft.	37.50	3x8, 6x8, 8x8	37.50
2x 8—22 ft. to 24 ft.	37.50	3x10, 8x10, 10x10	40.00
2x10—22 ft. to 24 ft.	37.50	3x12, 12x12	40.00
2x12—22 ft. to 24 ft.	37.50		

Rough Douglas Fir, No. 1 Common—More than carload lots in San Francisco:

Size in Inches	15 Ft. and Under	16 to 24 Ft.	25 to 32 Ft.
3 and 4x4	$20.00	$21.50	$22.50
3 and 4x6 and 8	20.00	20.50	21.50
6x6 to 8x8	20.50	21.50	21.50
3 and 4x10	20.00	21.50	22.50
6 and 8x10	21.00	22.00	22.00
10x10	21.00	21.00	23.00
3 and 4x12	20.00	21.50	22.50
6 and 8x12	21.50	22.50	22.50
10 and 12x12	21.00	21.00	23.00
3 and 4x14	21.00	23.00	24.00
6 and 8x14	23.50	23.50	23.50
7 and 9x14	23.50	21.50	24.50
10 and 12x14	22.00	22.00	24.50

	1-In. Rough, 10 In. x 16 Ft. and Under Y.P.	1-In. Rough, 10 In. x 16 Ft. and Under Fir	1-In. Rough, 10 In. x 16 Ft. and Under Hemlock	2-In. T. and G. 10 In. x 16 Ft. Y.P.	2-In. T. and G. 10 In. x 16 Ft. Fir
Boston	$72.00	....	....	$41.00	....
Cincinnati	55.00	....	....	54.00	....
Kansas City	53.25	$44.50	$43.50	48.00	....
Seattle	18.50	18.50	18.50	18.50	$18.50
Los Angeles	....	30.00*	30.00*	....	....
New Orleans	36.00	....	....	48.00	....
Chicago	32.00	....	....	30.00	....
St. Paul	60.00	54.00	33.50	65.00	57.00

	8 x 8-In. x 20 Ft. and Under Y.P.	8 x 8-In. x 20 Ft. and Under Fir	8 x 8-In. x 20 Ft. and Under Hemlock	8 x 8-In. x 20 Ft. and Under Spruce	12 x 12-In. 20 Ft. and Under Y.P.	12 x 12-In. 20 Ft. and Under Fir
Boston	$46.00	....	....	$37.00	$53.00	....
Cincinnati	30.00	....	....	....	54.00	....
Kansas City	38.00	$35.00	$35.00	....	42.50	35.00
Seattle	18.50	18.50	18.50	18.50	18.50	18.50
Los Angeles	....	30.00	....	....	....	30.00
New Orleans	40.00	....	....	....	40.00	....
Chicago	30.00	35.00	27.00	....	32.00	35.00
St. Paul	....	38.00	31.00	....	....	38.00

*Base.

ASPHALTUM—Price per ton in packages and bulk in carload lots:

	Brand	Package	Bulk
New York	Texaco	$25.00	....
New York	Mexican	19.00	$14.00
Chicago	Mexican	24.00	20.00
St. Louis	Texaco or Mexican	22.50	19.50
San Francisco	California	14.50	12.00
Dallas	Texaco and Mexican	19.00	....
Seattle	....	....	16.00

POLES—Price of Western red cedar poles is as follows:

	New York June 4, 1917	New York One Year Ago	Chicago	St. Louis	Denver
6 in. by 30 ft.	$5.24	$4.77	$4.59	$4.59	$3.97
7 in. by 30 ft.	6.90	5.90	6.10	6.10	5.30
7 in. by 35 ft.	9.70	7.85	8.60	8.60	7.55
8 in. by 35 ft.	11.20	9.75	9.90	9.90	8.65
7 in. by 40 ft.	11.35	9.95	10.00	10.00	8.75
*8 in. by 45 ft.	15.70	14.45	13.70	13.70	11.80
*8 in. by 50 ft.	18.35	16.85	15.95	15.95	13.65

*10c. higher freight rates on account of double loads.

OLD METALS—The following are the dealers' purchasing prices in cents per pound:

	New York June 4, 1917	New York One Year Ago	Cleveland June 4, 1917	Cleveland One Year Ago
Copper, heavy and crucible	27.50	24.50	29.50	25.00
Copper, heavy and wire	26.50	24.00	28.50	24.00
Copper, light and bottoms	25.00	21.00	25.25	20.00
Lead, heavy	9.00	6.00	9.00	6.00
Lead, tea	8.50	5.50	7.25	5.00
Brass, heavy	17.75	14.25	18.50	19.00
Brass, light	13.75	11.50	14.50	12.50
No. 1 yellow rod brass turnings	18.00	15.25	18.50	15.25
Zinc	7.00	11.00	6.75	13.00

Proposals

For Proposals Advertised See Pages 71 to 77 Inclusive

WATER-WORKS

Bids Close		See Eng. News-Record
June 11.	Unadilla, Neb.	June 7
June 12.	Kendallville, Ind. Adv. May 24 and 31.	June 7
June 15.	Niles, Mich.	June 7
June 18.	Wadsworth, O.	June 7
June 23.	Wickenburg, Ariz.	June 7
July 1.	Leeds, N. D.	June 7
July 1.	Fessenden, N. D.	June 7

SEWERS

June 10.	Newark, N. J.	June 7
June 11.	Los Angeles, Cal.	May 31
June 11.	Mason City, Ill.	June 7
June 12.	Newark, N. J.	May 17
June 12.	Newark, N. J.	June 7
June 13.	Lombard, Ill.	June 7
June 15.	New York, N. Y.	June 7
June 19.	Newark, N. J.	May 24
June 19.	Newark, N. J.	May 31
June 19.	Akron, O.	June 7
June 19.	Salt Lake City, Utah.	June 7
June 28.	Chicago, Ill. Adv. May 24.	May 24

STRUCTURAL STEEL WORK

June 9.	Granville, Pa.	June 7
June 9.	Amery, Wis.	June 7
July 9.	Dalton, Ga.	June 7
June 11.	Sayre, Ala.	June 7
June 14.	Fargo, N. D.	June 7
June 14.	Elizabeth, N. J.	June 7
June 20.	Salem, Ore. Adv. May 31 and June 7.	May 31
June 20.	Reily, O.	June 7
June 29.	Morrilton, Ark. Adv. June 7.	June 7
July 15.	Orange, Tex.	June 7

REINFORCED CONCRETE

June 9.	Middlebury, Pa.	May 31
June 11.	New Philadelphia, O.	May 24
June 11.	Sunbury, Pa.	May 31
June 11.	Greenburg, Pa.	June 7
June 11.	Burlington, Ia.	June 7
June 11.	Tanseley, Ont.	June 7
June 11.	Harrisonville, N. J.	June 7
June 12.	Eldora, Ia.	June 7
June 12.	Owatonna, Minn.	June 7
June 15.	Sibley, Ia. Adv. June 7.	June 7
June 18.	Donnoha, N. C.	June 7
June 18.	Elizabeth, N. J.	June 7
June 19.	Johnstown, Pa. Adv. June 7.	June 7
June 19.	Luverne, Minn.	May 31
June 20.	Canton, O.	May 31
June 21.	Columbus, O.	May 31
June 23.	Schoharie, N. Y.	June 7
June 25.	Clifton, Ariz.	June 7
June 26.	Monroe, Mich.	June 7

STREETS AND ROADS

June 9.	Oklahoma, Okla.	June 7
June 10.	Seattle, Wash.	May 24
June 11.	Wapato, Wash.	June 7
June 11.	Fayetteville, W. Va.	May 17
June 11.	Seattle, Wash.	May 31
June 11.	Olympia, Wash.	May 31
June 11.	Camden, N. J.	May 31
June 11.	New Philadelphia, O.	June 7
June 11.	Mason City, Ia.	June 7
June 12.	Yuma, Ariz.	June 7
June 12.	Red Bluff, Cal.	June 7
June 12.	Harrisburg, Pa. Adv. May 17 to 31.	May 17
June 12.	Thief River Falls, Minn.	May 31
June 12.	Florence, Ariz.	May 31
June 12.	Troy, Ala.	May 31
June 12.	Bethany, Mo.	June 7
June 12.	Baltimore, Md. Adv. June 7.	June 7
June 13.	Newton, N. J. Adv. June 7.	June 7
June 13.	Springfield, O.	June 7
June 14.	Jersey City, N. J.	June 7
June 14.	Fairmont, W. Va.	May 24
June 14.	Dayton, O.	May 31
June 14.	Ohio	June 7
June 15.	Wynne, Ark. Adv. May 31 and June 7.	May 31
June 15.	Cleveland, Tenn.	May 31
June 15.	Roselle Park, N. J.	June 7
June 15.	New York, N. Y.	June 7
June 16.	Kingwood, W. Va.	June 7
June 18.	Ft. Ransom, N. D.	May 31
June 18.	New Brunswick, N. J.	May 31
June 18.	Camden, N. J.	June 7
June 19.	Belvidere, N. J.	May 31
June 19.	Salt Lake City, Utah.	June 7
June 19.	Wildwood, N. J.	June 7
June 19.	Clinton, N. C.	June 7
June 20.	Belvidere, N. J. Adv. June 7.	June 7
June 20.	New Junction, O. Adv. June 7.	June 7
June 20.	Pine Bluff, Ark. Adv. June 7.	June 7
July 1.	Pine City, Minn.	May 31
July 2.	Hamlin, W. Va.	June 7
Aug. 13.	Lewiston, Idaho	May 24

EXCAVATION AND DREDGING

June 11.	St. John, N. B.	June 7
June 11.	Greenville, Miss.	May 31
June 12.	Manteca, Cal.	June 7
June 12.	Fresno, Cal.	May 24
June 12.	Crookston, Minn.	May 31
June 12.	Rochester, Ind.	June 7
June 13.	Bloomfield, Mo.	May 31
June 14.	Lonoke, Ark. Adv. May 17.	May 17
June 14.	Rockport, Mo.	June 7
June 15.	Algona, Ia.	May 31
June 15.	Topeka, Kan.	June 7
June 18.	Petersburg, Ind.	May 24
June 18.	Opelousas, Ia.	May 31
June 18.	Beardstown, Ill. Adv. June 7.	June 7
June 22.	Chaska, Minn.	May 31
June 26.	Albany, N. Y. Adv. May 31 and June 7.	May 31

BUILDINGS

June 8.	Newark, N. J.	June 7
June 9.	Jacksonville, Fla.	May 17
June 9.	Randolph, Ia.	May 24
June 9.	Greenville, O.	May 31
June 9.	Council Bluffs, Ia.	June 7
June 10.	Isabella, Tenn.	May 31
June 11.	Cleveland, O.	May 24
June 11.	Urbana, Ill. Adv. May 31.	May 31
June 11.	Monroe, Mich.	June 7
June 12.	New York, N. Y.	May 31
June 12.	Vandergrift, Pa.	May 24
June 12.	Centerville, Ia.	May 31
June 12.	Franklin, Neb.	June 7
June 12.	Deerwood, Minn.	June 7
June 12.	Beacon, N. Y.	June 7
June 13.	Eugene, Ore.	June 7
June 13.	Weehawken, N. J.	June 7
June 14.	Wessington Springs, S. D.	June 7
June 14.	Bayonne, N. J.	June 7
June 14.	Portland, Me.	June 7
June 14.	Waterbury, Conn.	June 7
June 15.	Baltimore, Md.	June 7
June 15.	Lakota, N. S.	May 24
June 15.	Miami, Okla.	May 31
June 18.	Austin, Tex.	May 31
June 18.	Epworth, Ia.	May 31
June 19.	Clearwater, Fla.	May 31
June 19.	New York, N. Y. Adv. June 7.	June 7
June 20.	Wolford, N. D.	June 7
June 20.	Martinsburg, Ia.	June 7
June 22.	Lebanon, O.	May 31
June 25.	Ft. Madison, Ia.	June 7
June 26.	Albany, N. Y.	June 7
July 1.	Riverton, Minn.	June 7

FEDERAL GOVERNMENT WORK

June 11.	Bridgeport, Conn.	May 17
June 11.	New York, N. Y. Adv. May 17 to June 7.	May 17
June 11.	Washington, D. C.	May 24
June 11.	Ft. Mifflin, Pa.	May 31
June 11.	Philadelphia, Pa.	May 31
June 11.	Boston, Mass.	June 7
June 11.	Pensacola, Fla.	June 7
June 11.	San Antonio, Tex.	June 7
June 12.	State College, Pa. Adv. May 17 and 24.	May 17
June 14.	Cherryvale, Kan.	May 17
June 14.	Three Rivers, Cal.	May 17
June 14.	Ft. Bliss, Tex. Adv. May 24 to June 7.	May 24
June 14.	Washington, D. C. Adv. May 24 to June 7.	May 31
June 14.	New York N. Y.	June 7
June 15.	Memphis, Tenn. Adv. May 24 to June 7.	May 24
June 15.	Chapel Hill, N. C.	June 7
June 16.	Montgomery, Ala. Adv. May 24 to June 7.	May 17
June 16.	San Francisco, Cal.	June 7
June 16.	Wash Woods, N. C. Adv. June 7.	June 7
June 18.	Akron, O.	May 17
June 18.	Pensacola, Fla.	May 31
June 19.	Montevideo, Minn.	May 17
June 19.	Aledo, Ill. Adv. May 24 and 31.	May 17
June 20.	Beaufort, S. C. Adv. May 17.	May 17
June 20.	Ft. Royal, Va.	May 31
June 20.	Galveston, Tex. Adv. May 24 to June 7.	May 31
June 21.	Cambridge, Md.	May 17
June 22.	Butler, Mo.	June 7
June 22.	Fordyce, Ark. Adv. May 17 and 24.	May 24
June 23.	Raton, N. M.	May 17
June 23.	New York, N. Y. Adv. May 24 to June 7.	May 31
June 25.	Washington, D. C.	May 31
June 25.	New Orleans, La. Adv. May 31 to June 7.	May 31
June 25.	Bremerton, Wash.	June 7
June 26.	Monesson, Pa.	May 31
June 27.	Vineland, N. J.	June 7
June 28.	New Orleans, La. Adv. May 31 and June 7.	May 31
June 28.	Detroit, Mich. Adv. May 31.	May 31
June 28.	Prescott, Ark.	June 7
July 12.	Hoopeston, Ill.	June 7

MISCELLANEOUS

June 11.	Pipes, etc. New York, N. Y.	June 7
June 11.	Incinerator Plant. New York, N. Y.	June 7
June 12.	Cement—Newton, N. J.	June 7
June 12.	Docks—Buffalo, N. Y.	June 7
June 14.	Timber Groynes, Brooklyn—N. Y.	June 7
June 25.	Harbor Improvements—Newport, Ore.	June 7

Where name of official is not given, inquiries should be addressed to City Clerk, County Clerk or corresponding official.

WATER-WORKS

Proposed Work

N. Y., Attica—Village receives bids in summer installing water system involving new pumping station, main, reservoir and filter plant. W. E. Hopkins, clk. C. C. Hopkins, 346 Cutler Bldg., Rochester, engr.

N. J., Midvale—See "Newark, N. J."

N. J., Newark—Bd. Wks. and T. L. Raymond, mayor, will have plans prepared for development of Wanaque watershed. About $8,060,000. City also plans to acquire 2000 acres land near Midvale, Passaic Co., for huge reservoir, 6 mi. long and 1½ mi. wide with dam, 1725 ft. long.

Pa., Lebanon—City negotiating with Bethlehem Steel Co., which serves city with water on small scale, to increase supply to 5,000,000 gal. daily additional. E. H. Shroff, supt.

Ala., Lineville—City retained J. B. McCrary Co., engrs., 3rd Natl. Bank Bldg., Atlanta, to prepare plans waterworks. About $25,000.

Tenn., Paris—City soon lets contract installing filtration plant. W. J. Holman, engr.

Ky., Louisville—Louisville Water Co. will construct at its own expense full water facilities to proposed army training camp to be established at Audubon Park on Preston Street Rd. south of city. Plans include 12,000-ft. pipe, connecting 24-in. line at end of Shelby St., with Audubon Park and running along Preston Street Rd. J. B. Wilson, supt.

O., Chardon—Village to let contract about July 10 installing water-works system. Noted May 31.

O., East Youngstown—(Warrensville P. O.)—Town Council plans to issue $45,000 bonds to complete pumping station.

O., Ironton—City plans pumping station and waterworks. About $375,000. H. M. Paul, clk.

Mich., Alma—See "Sewers."

Mich., Grayling—Bd. Supervs. authorized purchase of 1½-hp. gasoline engine and pump to replace present system of water supply at Crawford Co. Infirmary.

Wis., Portage—City receives bids in summer installing filter plant, 1,500,000-gal. capacity. F. Gross, clk.

Kan., Altoona—City election June 22 to vote on $25,000 bonds to improve water system. W. B. Rollins & Co., 209 Railway Exchange Bldg., Kansas City, Mo., engrs.

Neb., Omaha—Metropolitan Water Dist., 39th and Lafayette Sts., plans to build pumping station. About $30,000.

Neb., Rogers—Town plans to install water system including tower.

Water-Works (Continued)

S. D., Bonesteel—City having plans prepared by Bruce & Standeven, engrs., 430 Bee Bldg., Omaha, for water and electric-light plants.

Mont., Livingston—(Official)—Burns & McDonnell, engrs., 400 Interstate Bldg., Kansas City, Mo., completed plans waterworks plant, taking water from Yellowstone River. Plans include 3,000,000-gal. filtration system, new power plant, settling basins, etc. Noted May 10.

Okla., Kingfisher—City plans to improve water system. A. E. Finuf, supt.

Okla., Red Fork—(Official)—City receiving bids in June installing water-works system; plans include gas engine, pump, motor, 2- and 4-in. mains, reservoir, etc. About $20,000. Noted May 17.

Colo., Greeley—See "Structural Steel."

Colo., Pueblo—City soon receives bids laying 2- to 12-in. water mains in Mesa Paving Dist. No. 1. D. P. Porter, supt.

Colo., Sterling—City selected site for proposed water pumping plant. G. C. Forgale, supt.

Colo., Wiley—Town Bd. considering plans new well and storage reservoir.

Nev., Reno—(Official)—Burns & McDonnell, engrs., 400 Interstate Bldg., Kansas City, Mo., completed plans improvements to waterworks. About $550,000. S. A. Campbell, mgr. Noted Apr. 5.

Bids Desired

N. Y., New York—(Official)—Until June 19 by C. Strauss, pres. bd. water supply, Municipal Bldg., Contract No. 180, dwelling houses and outhouses along line of Catskill aqueduct between Ashokan and Hill View reservoirs; advertised in this issue.

Va., Lynchburg—(Official)—Until June 25 by City for building filtration plant and appurtenances; advertised in this issue.

O., Bradford—(Official)—Until June 18 by L. E. Harvey, clk. bd. pub. affairs, for improving water-works; advertised in this issue.

Wis., Amery—See "Structural Steel."

Neb., Unadilla—Until June 11 by village for waterworks system well, 8 in. diam., 40 ft. deep, 1 centrifugal pump, 1 10 hp. oil engine, 1 elevated tank, 25,000-gal. capacity, 6660 ft. 4-in. c. i. mains, 670 ft. 6-in. iron mains, 14 fire hydrants. I. F. Lowe, clk. Grant & Fulton, Bankers Life Bldg., Lincoln, engrs., $12,200. Noted Apr. 26.

N. D., Fessenden—Until July 1 by city installing waterworks and sewers, including 100,000-gal. septic tank. About $55,000. T. R. Arnold, Leland Hotel, Minot, engr.

N. D., Leeds—Until July 1 by City installing waterworks and sewers. About $35,000. T. R. Arnold, Leland Hotel, Minot, engr.

Ariz., Wickenburg—Until June 23 by city installing electric light plant and extending and improving water system. H. P. Ward, clk. Noted Apr. 19.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Bedford Hills**—Montefier Home let contract installing pumping plant and water supply to J. E. Bunting & Co., 131 Maple Ave., Flushing, L. I.

N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., received low bid making borings at Woodstock and Glenford Dikes of Ashokan Reservoir, Hurley, Ulster Co., from Sprague & Henwood, Inc., 120 B'way, $72,250. Noted May 10.

★**S. C., Bishopville**—(Official)—City let contract water-works, mains and sewer lines, involving 4032 lin.ft. 4-in. c.-i. pipe, 2904 lin.ft. 6-in. and 204 lin.ft. 10-in. c.-i. pipe, also 43,215 lin.ft. T. C. pipe sewer to Sullivan, Long & Hagerty, Bessemer, Ala., $43,073.

★**O., Ironton**—City let contract installing water main from pumping station to reservoir to Mountain, Scherrer & Grimes.

★**O., Toledo**—City let contract addition to Bway high-service pumping station to Spear, Moylan & Lasley, Toledo, $86,000. Noted May 24.

★**Ill., Des Plaines**—Village let contract installing 11,500 lin.ft. c. i. water mains, valves, hydrants, etc. to M. McElligott, 1408 Main St., Evanston, $18,000.

★**Wis., Osceola**—City let contract installing water and sewer mains to W. C. Fraser, 707 Germania Life Bldg., St. Paul, $17,500 each; pump house and suction well to A. Lenhart, Osceola, $2212.

★**Kan., Caldwell**—(Official)—Town let contracts improving water and light plant as follows: P-K Engrs., Syndicate Trust Bldg., St. Louis, Mo., 2 275-hp. Ames Unaflow Engines and 1 200-kv.-a general electric generator with condensers, $19,330; Westinghouse Electric & Mfg. Co., 165 Bway., New York City, switchboard, $2940; Page Boiler Co., 815 Larrabee St., Chicago, 2 150-hp. water tube boilers, $9550; Thermal Efficiency Co., 717 Finance Bldg., Kansas City, Mo., 400-hp. Cochrane heater, $1216; Natl. Cast Iron Pipe Co., Kansas City, Mo., 4-in. pipe at $61.95 per ton; 6-in. and larger $58.95 per ton for Class "B" $59.85 per ton for Class "A." Noted Apr. 19.

★**Kan., Hoisington**—City let contract installing waterworks to Connor Constr. Co., 4008 Montgall, Kansas City, $80,000.

★**Okla., Oklahoma City**—City let contract improving water-works to Holmboe Constr. Co., 315 Majestic Bldg., $59,900. Noted May 3.

★**Ore., Hermiston**—City let contract installing dam and reservoir to Newport Constr. Co., Newport.

★**Cal., San Dimas**—See "Reinforced Concrete."

SEWERS

Proposed Work

Mass., Fitchburg—Council plans to install sewers portions Hobson and Canton Sts. and Oak Hill Rd. W. A. Davison, clk.

R. I., Woonsocket—City plans to install sewers portions Paradis and Harris Aves., Kindergarten and Varry Sts. and Meadow Rd. F. H. Mills, city engr.

Pa., Ambridge—Boro approved ordinance authorizing extension and construction of sanitary sewerage system. J. D. Leaf, engr.

S. C., Spartanburg—City election June 12 to vote on $40,000 bonds to extend sewerage system. R. Tull, city engr.

O., Bowling Green—City passed resolution to construct lateral sanitary sewer from Outlet 81, through Case and Merry Aves. to Thruston Ditch; also lateral sewer from Outlet No. 75 to Case Ave. S. W. Bowman, mayor.

O., Cleveland—Ford-McCaslin Co., Williamson Bldg., plans storm and sanitary sewers and private sewage disposal plant to serve proposed community on Mayfield Rd. until South Euclid Twp. shall incorporate and provide general sewer facilities.

O., Coshocton—City plans to install sanitary sewer in portion Hay Ave. A. Fisher, city engr.

O., Newark—City plans to install sewers in portions Buena Vista and Florence Sts. E. H. Wells, city engr.

O., Steubensville—City passed ordinance for sewers in South Bend Blvd. J. N. Leach, city engr.

O., Urbana—City plans to install storm sewer in portion West Water St. E. F. Sweetman, city engr.

O., Warren—City plans to install sanitary sewer in portion Iowa St. C. Lawrence, city engr.

Ind., South Bend—Bd. Pub. Wks. plans to install local sewer in portions Clover St. F. J. Anderson, city engr.

Mich., Alma—City plans to spend $400,000 for sewer and water extensions and street and sidewalk improvements.

Mich., Menominee—T. R. Hasley, city engr., preparing plans for new sewerage system.

Mich., Pontiac—City retained A. Barnett, engr., to prepare plans and submit estimate of cost of installing sanitary sewer portion Chamberlain St.

Ia., Davenport—City plans to improve sewers in Rock Island, Valley and Oak Sts. About $100,000. A. R. Boudinot, city engr.

Ia., Seymour—City retained M. G. Hall, engr., Centerville, to prepare plans for sewerage system.

Ia., Sioux City—City plans to install sanitary sewers portions South St. Marys St. and 3rd Ave. T. H. Johnson, city engr.

Ia., Sioux City—City plans to install storm sewers, portions Nebraska and Pearl Sts. T. H. Johnson, city engr.

Minn., Duluth—City plans to install sanitary sewers portions 8th and Winona Sts., Superior St. alley; storm sewers in portions Minneapolis, Wadena and Woodland Aves. L. Ayers, city engr.

Kan., Manhattan—City plans to install storm sewer in Bertrand St. A. Rhodes, city engr.

S. D., Sioux Falls—City plans to install lateral sewers in portions Nesmith, 6th, 19th and 3rd Sts. S. B. Howe, city engr.

Wyo., Cheyenne—City will hold election within 60 days to vote on $60,000 bonds to install storm sewers. E. W. Glakeke, city engr.

Mont., Butte—City plans sanitary sewer in Special Improv. Dist. No. 208. J. J. Armstrong, city engr.

Mo., Cape Girardeau—City preparing plans installing West End sewer. About $300,000. A. Stiver, city engr. W. W. Horner, 5842 Julian Ave., St. Louis, cons. engr.

Mo., St. Joseph—City election June 26 to vote on $350,000 bonds to improve sewers. C. P. Hoff, city engr. Noted May 24.

Tex., McAllen—City voted $30,000 bonds to install sewerage system. Noted Apr. 19.

Okla., Commerce—City election soon to vote on $35,000 bonds to install sewerage system, involving $34,200 ft. 8- to 15-in. pipe. Noted May 3.

Okla., Jennings—City plans to issue bonds to install sanitary sewerage system.

Colo., Ft. Collins—City Council considering plans for 2 trunk line sewers. F. P. Gaeder, city engr.

Ariz., Douglas—City plans to extend sewerage system and construct septic tank in eastern section of city.

Ariz., Flagstaff—(Official)—A. H. Johnson, town clk., soon receives bids extending sewerage system. About $60,000. C. M. Brooks, city engr. Noted May 31.

Wash., Seattle—A. H. Dimock, city engr., submitted report to Bd. Pub. Wks. estimating cost installing water mains in Michigan St., involving 7000 lin.ft. 6-in. wood pipe, 1300 ft. 2-in. galvanized iron pipe, 19 6-in. hydrants, at $11,000.

Ore., Ashland—Council plans to install sewers in Main and Lincoln Sts., et al. About $12,000.

Ore., Portland—City soon receives bids installing sewers in 50th St. and 31st Ave. Dist. P. Dater, city engr.

Cal., Fresno—City lets contract about July 2, installing sewerage system in Arlington Heights, involving 6- to 12-in. vitr. clay pipe, 52 manholes, etc. About $30,000. C. C. Van Valkenburg, city engr. Noted Apr. 12.

Cal., Los Angeles—City lets contract in July installing Ocean Beach sewerage system. About $50,000. A. H. Wright, clk. Olmsted & Gillelen, 1112 Hollingsworth Bldg., engrs.

Cal., Los Angeles—City plans to install sewers, portions Crocker and 69th Sts. H. Hamlin, city engr.

Ont., Magog—City voted in favor of by-law for $65,000; install sewers, pave streets and construct sidewalks. A. Touriguy, clk.

BIDS DESIRED

O., New Junction—See "Streets and Roads."

N. Y., New York—Until June 15 by M. M. Marks, boro pres., alteration to receiving basins with inlets on portion Jefferson and Broome Sts.

N. Y., Port Chester—(Official)—Until June 12 by Bd. Trustees for sewage pumping machinery; advertised in this issue.

N. J., Newark—Until July 10 by Passaic Valley Sewerage Comn., 31 Clinton St., Newark, for foundations and connections of proposed pumping station, Scott Ave., between Mercer and Lester Sts., Wallington.

N. J., Newark—(Official)—Until June 12 by Passaic Valley Sewerage Comrs. for building northerly portion of section 27, Kearny Harrison Newark Branch Intercepting Sewer. J. H. Quigg, clk.

O., Akron—Until June 19 by M. Rebel, clk. bd. comrs. Summit Co., storm sewer in Bath Twp.

Ill., Lombard—Until June 13 by Bd. Local Improv. installing sewers and sewage treatment plant. S. R. Smith, pres. W. S. Shield, 1201 Hartford Bldg., Chicago, engr. Noted Apr. 19.

Ill., Mason City—Until June 11 by City Clk. for outlet and septic tanks for sewerage and drainage system. About $20,000. W. G. Burnsmier, mayor.

N. D., Fessenden—See "Waterworks."

N. D., Leeds—See "Waterworks."

Utah, Salt Lake City—Until June 19th by city installing sewers, Sewer Extension No. 371, 4th and Columbus St. S. Q. Cannon, city engr.

Ariz., Yuma—See "Streets and Roads."

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**N. Y., Amsterdam**—City let contract installing surface water sewers, portions Grove St. to DeRosa & Romano.

N. Y., New York—(Official)—Bd. Water Supply, Municipal Bldg., received low bids, furnishing and delivering cement for use at Woodstock and Glenford dikes of Ashokan reservoir, to be delivered to West Hurley station of Ulster and Delaware R.R., from Alsens American Portland Cement

Sewers (Continued)

Works, 45 Bway., $34,500; Atlas Portland Cement Co., 30 Broad St., $35,550; Vulcanite Portland Cement Co., 8 West 40th St., $35,775. Noted May 10.

★**Pa., Phoenixville**—Boro let contract sewer on portion Gay St. to F. Cannon, Allentown. Noted Apr. 19.

★**N. C., Durham**—Erwin Cotton Co. let contract installing sewage disposal plant and system for 1000 millhouses to Cement Products Co., Wilmington, $10,000.

★**S. C., Bishopville**—See "Waterworks."

★**Ga., Tennille**—City let contract sewage disposal tank in connection with sewerage system, to R. T. Aderhold, College Park.

★**O., Cincinnati**—City let contract installing sewers, various streets to Kirchner Constr. Co., 211 West 9th St. Noted May 24.

★**O., Marietta**—See "Reinforced Concrete."

★**O., Toledo**—City let contract building 8 sewers to P. H. Watters and T. J. Kelly, $5820 and $10,052 respectively.

★**Ind., Anderson**—City let contract installing East Lynn St. Dist. sewer to Minnick Constr. Co., Newcastle, $15,990; 6th and Sycamore St. sewers to L. Burke, $4171.

★**Ind., Indianapolis**—Bd. Pub. Wks. let contract West 10th St. main sewer to F. M. Torson, Kansas City, Mo., $10.55 per lin.ft. using brick. Noted May 17.

★**Mich., Lansing**—City let contract sewers in Barnes, Smith and Delevan Sts., to Fisher & Noyes, $11,456.

★**Ill., Champaign**—Bd. Local Improv. let contract sanitary sewer, Garwood Dist., to A. Birt, East Main St., Decatur.

★**Wis., Kenosha**—City let contract sewer in Brockett St. to P. Brandsen, $26,140.

★**Wis., Osceola**—See "Water-Works."

★**Wis., Racine**—Bd. Pub. Wks. let contract sewer and water connections in Wilson, Ann, Phillips, Holmes, 10th and 12th Sts. to F. Fair; in Carlisle Ave. to Fall Bros. Noted May 17.

★**Ia., Sioux City**—City let contract installing sewers portions 32nd and 15th Sts. to W. B. Carter. Noted May 17.

★**Ia., West Burlington**—(Official)—W. J. Giesselman, town clk., let contract sanitary sewerage system, sewage disposal plants and sewerage pumping plant to A. A. Dobson, Lincoln, $38,483. Noted May 10.

★**Minn., St. Paul**—City let contract installing sewer portion Brimhall St. to O'Neil & Preston, 60 East 6th St.

★**S. D., Aberdeen**—City let contract installing sewers, Sewer Dist. No. 123, to N. Burchard. Noted Apr. 12.

★**Ark., Clarksville**—See "Streets and Roads."

★**Okla., Claremont**—City let contract sewer in Dist. No. 13 to Municipal Excavator Co., Oklahoma.

Cal., Watts—See "Streets and Roads."

★**Ont., Listowel**—See "Reinforced Concrete."

STRUCTURAL STEEL WORK

Proposed Work

N. J., Jersey City—City had plans prepared for steel viaduct over tracks of Central R.R. of New Jersey, on Richards St. A. H. Moore, comn. of parks, in charge of work.

N. J., Trenton—City Comn. plans to build new bridge on Prospect St., 100-ft. wide. A. Swan, city engr.

N. J., Trenton—State, county and city officials approve plans of A. Harris, co. engr., for steel arch girder bridge over Sanhican Creek, on Lafayette and Willow Sts.

Pa., Hershey—State Water Supply Comn., Harrisburg, approved plans of county for bridge over Swartara Creek. Address co. clk., Harrisburg.

Fla., Jacksonville—County election July 9th to vote on bonds to build bridge over St. Johns River to connect Jacksonville and South Jacksonville. Noted Apr. 19.

O., Lima—(Official)—City to sell $100,000 bonds, June 18th, to build bridges over Ottawa River. D. L. Rupert, audr.

Mich., Grayling—Co. Supervs. plan to build 2 cement bridges over Au Sable River on Cedar and State Sts.

Ill., London Mills—County plans to build steel bridge over Spoon River near London Mills. Address Co. Clk., Lewistown.

Wis., Milwaukee—J. C. Pinney, Jr., supt. dept. bridges, submitted report to Council, estimating cost 110-ft. span on Cedar St. at $412,000; 150-ft. span, $477,000. About $250,000 available for work. G. Staal, city engr.

Wis., Shawnee—(Official)—County lets contract in June building 20 bridges, 20-88-ft. long. O. C. Rollman, comr. highways.

Minn., Bemidji—County sold $39,000 bonds to build bridges. Noted Apr. 19.

Minn., Minneapolis—City, Great Northern Ry. and Minneapolis & St. Paul R.R. plan to widen Washington Ave. bridge over railroad tracks. F. W. Cappelin, city engr. A. H. Hogeland, 4th and Jackson Sts., St. Paul, ch. engr., former R.R., and R. G. Kenly, Transportation Bldg., Minneapolis, ch. engr., latter.

Mont., Weede—Great Northern Ry. plans to build 1600-ft. bridge over Musselshell River. J. A. Bohland, St. Paul, bridge engr.

Ark., Ft. Smith—City voted to form improvement district to build bridge over Arkansas River into Sequoyah Co., Okla. About $500,000. M. H. Reed, city engr.

Tex., Galveston—City and railroads entering Galveston will receive bids about June 30 reconstructing damaged portion Galveston Causeway. Concrete-Steel Engr. Co., Park Row Bldg., New York City, engrs. F. Merritt, ch. engr., Gulf, Colorado & Santa Fe Ry., chn. bd. causeway engrs.

Okla., Buffalo—County plans to build bridges.

Okla., Chandler—See "Streets and Roads."

Okla., Eaufaula—Jefferson Highway Bridge Co. soon receives bids toll bridge over South Canadian River. About $150,000. Harrington, Howard & Ash, Orear-Leslie Bldg., Kansas City, Mo., engrs. Noted Apr. 19.

Okla., Nowata—County plans to build several bridges and culverts during year.

Okla., Stroud—See "Streets and Roads."

Colo., Greeley—Union Pacific R.R. plans steel water tank, 63,000 gal. capacity. R. L. Huntley, 15th and Dodge Sts., Omaha, ch. engr.

Wash., Olympia—State Highway Comn. rejected bids building Coweman and Kalama River bridges. New bids.

Wash., Tacoma—County soon receives bids building 85-ft. steel span over Hylesbos Creek, 300-ft. long, including approaches. About $30,000. D. H. White, co. engr.

Wash., Winlock—City soon lets contract building new bridge over Olequa Creek. R. Fletcher, city engr.

Ore., Astoria—See "Streets and Roads."

Cal., Visalia—County soon receives bids building 2 bridges on State Highway between Visalia and Tulare.

Que., Three Rivers—Wayagamack Pulp and Paper Co., Ltd., plans to rebuild steel trestles. A. Helin, 103 Ave. Laviolette, engr.

Bids Desired

N. J., Elizabeth—Until June 14 by Bd. Freeholders, building new bridge over brook at Oakland Pl. J. L. Bauer, co. engr.

Pa., Granville—(Official)—Until June 9 by Town Supervs., building Daupert's Bridge, Ferguson Valley Rd. W. Snyder, secy.

N. C., Donnoha—Until June 18 by Comrs. Forsyth and Yadkin Cos., Winston-Salem, building steel bridge, concrete masonry, over Yadkin River near Donnoha. J. M. Lents, clk.

Ga., Dalton—Until July 9 by Comrs. Whitfield and Murray Cos., for 144-ft. steel bridge over Conasauga River at Jones Ford, approaches 36 and 72 ft. long. J. R. McGinty, clk. Noted Apr. 19.

O., Relly—(Official)—Until June 20 by Co. Comrs., Hamilton, building bridge over Indian Creek. W. W. Crawford, clk.

Wis., Amery—Until June 9 by Village for steel water tank. V. H. Christenser., village clk.

Ark., Morrillton—(Official)—Until June 29 by Bd. Co. Comrs. bridge over Arkansas River; advertised in this issue.

Tex., Orange—(Official)—Until July 15 by Mayor for steel frame warehouse for city; advertised in this issue.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Westfield**—(Official)—City let contract building Loomis St. Bridge to L. J. Sieling, 171 Madison Ave., New York City, $10,445. Noted May 31.

★**R. I., Oakland**—State Bd. Pub. Rds. let contract State Bridge No. 5 to E. J. Hollen, 55 Eddy St., Providence.

★**W. Va., Cass**—Co. comrs. let contract bridge over Greenbrier River to Concrete-Steel Bridge Co., $11,500.

★**N. C., Shelby**—See "Railways."

★**O., Warren**—Liberty Steel Co., West Reserve Bank Bldg., let contract steel mill and warehouse to Hunter Constr. Co. About $600,000. Noted May 10.

★**Ind., Auburn**—County let contract building 7 bridges to M. A. Butler, Spencerville.

★**Ind., Huntington**—Co. Comrs. let contract building 9 bridges to Howell & Hall, Wabash; Elkhart Bridge & Improv. Co., Elkhart; A. T. Lines, Warren; I. J. Walker, Huntington.

★**Ia., Clarion**—County let contract 3 bridges and 68 culverts to Iowa Bridge Co., Des Moines, $14,500 and $15,750 respectively; 32 culverts to H. G. White, Clarion.

★**Minn., Benson**—See "Excavation and Dredging."

★**Minn., St. Paul**—See "Streets and Roads."

★**Mo., Kansas City**—Bd. Pub. Wks. let contract, 4th St. viaduct to Midland Bridge Co., 504 Railway Exchange Bldg., $149,818.

Tex., El Paso—Co. comrs. received low bids building bridge connecting Island near Fabens with mainland from V. E. Ware, $14,400; El Paso Bridge & Iron Works, 517 El Paso & Southwestern R.R. Bldg., 2 bids, $5449 and $5719, alternate bids, $8217, $8985, $10,726; Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo., 10 bids, 1, $15,295; 2, $14,800; 3, $13,765; 4, $13,000; 5, $15,450; 6, $14,700; 7, $13,660; 8, $13,180; 9, $8335; 10, $6440; Lee Moor Co., 702-2 Republics Bldg., El Paso, $8934.

★**Tex., Wichita Falls**—See "Reinforced Concrete."

★**Ariz., Clifton**—City let contract bridge over Santa Fe River to Midland Bridge Co., 504 Midland Bldg., Kansas City, Mo., $27,079.

★**Wash., Seattle**—(Official)—County let contract trestle bridge over Kenmore Slough to C. Geske & Co., Pacific Blk., $12,355. Noted May 10.

REINFORCED CONCRETE

Proposed Work

Conn., Bridgeport—Council plans to build concrete bridge over Berkshire Pond on Island Brook Ave. About $15,000. A. H. Terry, city engr.

Conn., Westville—F. L. Ford, city engr., New Haven, preparing plans concrete tide gate dam on West River, 100 ft. long.

N. J., Hopewell—Boro approved plans of Phila. & Reading R.R. for rein.-con. bridge over tracks on Greenwood Ave. S. T. Wagner, Reading Terminal Bldg., Phila., ch. engr.

Pa., Phila.—Bureau Surveys completed plans for rein.-con. bridge and viaduct over Schuylkill River, 34th and University Ave., ½-mi. long, central bascule span, 400-ft. About $1,000,000. G. E. Datesman, dir. pub. ser.

Pa., Phila.—Ketterlinus Lithographing Co., 4th and Arch St., plans 8-story, rein.-con. and steel addition, 4th St. Ballinger & Perrot, 17th and Arch Sts., archts.

Pa., Shenandoah—Shenandoah Water Co. having plans prepared by F. H. Shaw, engr., 32 North Duke St., Lancaster, for rein.-con. reservoir, 12,000,000-gal. capacity. W. H. Water, pres.

O., Akron—County having plans prepared by Harrington, Howard & Ash, engrs., Orear-Leslie Bldg., Kansas City, Mo., for building North Hill viaduct, concrete. About $1,200,000.

Minn., Minneapolis—Y. M. C. A. soon lets contract 12-story, rein.-con. and steel building, 9th St. and Mary Pl. About $600,000. Long, Lamoreaux & Long, 830 Hennepin Ave., archts. Noted May 3.

Kan., Winfield—County plans to build rein.con. bridge over Walnut River. About $20,000. F. V. Brown, clk.

Mo., Rolla—Rolla Special Rd. Dist. having plans prepared by F. G. Harris, engr., for concrete and steel bridge. Address A. A. Smith, Rolla.

Ark., Ft. Smith—I. G. Hedrick of Hedrick & Cochrane, cons. engrs., 13th and Locust Sts., Kansas City, Mo., submitted report to city estimating cost of rein.-con. bridge on Garrison Ave. from 2nd St., rising over railroads and reaching across Arkansas

Reinforced Concrete (Continued)

River with roadway wide enough for 2 vehicles and street car to cross abreast at $450,000.

Wash., Seattle—Bd. Pub. Wks. soon receives bids building rein.-con. viaduct on Yesler Way from 1st to Railroad Ave. About $20,000. A. H. Dimock, city engr.

Wash., Spokane—Centennial Flour Mill Co., Hoge Bldg., Seattle, plans 1,000,000 bushel rein.-con. terminal elevator and flour mill. G. I. Toevs, Spokane, mgr.

Cal., Esparto—Bd. Educ. soon receives bids rein.-con. school. W. H. Weeks, 75 Post St., San Francisco, archt.

BIDS DESIRED

N. Y., Schoharie—(Official)—Until June 23 by O. Wilsie, town clk., for rein.-con. arch bridge over Foxenkill Creek. E. J. Doyle, DeGraaf Bldg., Albany, engr. Noted Apr. 19.

N. J., Elizabeth—Until June 18 by Bd. Freeholders building 2 rein.-con. bridges, over Rahway River. J. L. Bauer, co. engr. Noted May 4.

N. J., Harrisonville—Until June 11 by Bd. Freeholders, Woodbury, rein.-con. bridge over Oldman's Creek. H. B. Keasbey, co. engr.

Pa., Greensburg—(Official)—Until June 11 by J. S. Sell, co. controller, rein.-con. bridge over 4 Mile Run.

Pa., Johnstown—(Official)—Until June 19 by T. J. Harris, supt. streets and pub. wks., building 2-span rein.-con. bridge over Little Conemaugh River on Walnut St., advertised in this issue.

Mich., Monroe—Until June 26 by Co. Rd. Comrs. building concrete girder bridge over Swan Creek, Sects. 6, 5, 6, 4, 10, E., Berling Twp. J. W. White, engr.

Ia., Burlington—(Official)—Until June 11 by E. P. Weinstein, city clk., 69-ft. rein.-con. bridge on West St., 26 ft. wide. C. E. Waterhouse, city engr.

Ia., Eldora—(Official)—Until June 12 by County for 3 rein.-con. bridges, 1 60-ft. and 2 42-ft. spans over Iowa River, 1-4 36-ft. spans over South Fork, 1 40-ft. span over Beaver Creek. About $18,000. E. W. Dunn, co. engr.

Ia., Sibley—(Official)—Until June 15 by J. J. Shoemaker, town supt., rein.-con. chimney; advertised in this issue.

Minn., Owatonna—(Official)—Until June 12 by city clk., for rein.-con. bridge over Straight River, 2 65-ft. arches, 34-ft. roadway, 2 8-ft. sidewalks, etc. H. Dartt, city engr.

Ariz., Clifton—Until June 25 by Town Council, building rein.-con. bridge over San Francisco River. A. J. Kerr, town engr.

Ont., Tansley—Until June 11 by W. Panton, Milton, for rein.-con. bridge. About $60,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—Carter Rice Corp. let contract large rein.-con. storage warehouse, Summer St., to Natl. Engr. Corp., 40 Central St.

★**Mass., Boston**—A. Geiger, Jr., 95 Milk St., let contract 2-story, 50 x 200-ft. rein.-con. garage, Brookline Ave., to Evatt Constr. Co., 161 Devonshire St.

★**N. J., Paterson**—Bd. Freeholders let contract 3 span rein.-con. bridge over Passaic River to Logan Constr. Co., 13 Park Row, New York City, $63,500. Noted May 3.

★**Pa., Pittsburgh**—County let contract 2 rein.-con. bridges, Station No. 31, Baldwin Twp., Station No. 57, Mifflin Twp. to Pitt Constr. Co., Fulton Bldg., $5510 and $10,162 respectively.

★**Md., Baltimore**—State Rds. Comn. let contract 116-ft. rein.-con. bridge, over 15-mi. creek on National Pike to J. G. Robinson, Hancock.

★**Ga., Atlanta**—Southern Ry., Georgia Ry. and Power Co. and County let contract rein.-con. bridge over Southern Ry. tracks near Bolton to A. Tufts, Candler Annex.

★**O., Marietta**—City let contract rein.-con. reservoir on Gross Hill to A. F. Morelock, Fulton Bldg., Pittsburgh, $75,956. Noted May 31.

★**Ia., Harlan**—County let contract building 18 rein.-con. box culverts to Lana Constr. Co., 301-4 Rogers Bldg., Council Bluffs, $18,281.

★**Neb., Omaha**—Chicago-Great Western R. R. let contract rein.-con. dryer building, 1 to 3 stories, also 39 tanks, to R. H. Folwell Engr. Co., Monadnock Bldg., Chicago. About $110,000.

★**Tex., Wichita Falls**—Co. comrs. let contract rein.-con. bridge on Burnett St. to Missouri Valley Bridge & Iron Co., Denver, $44,890; 2 steel bridges over Wichita River to Austin Bros., 156 Greenwood Ave., Atlanta, $33,436.

★**Cal., San Dimas**—(Official)—San Dimas Water Co. let contract installing 7,000,000-gal. rein.-con. reservoir to Klusinan & Elsae, Cucamonga. Noted May 17.

★**Cal., San Rafael**—McLeran & Peterson let contract concrete lining for Pine Mountain Tunnel to Cahill-Vensano Co., 460 Montgomery St., San Francisco, $41,375.

★**Ont., Listowel**—Town let contract 150,000 gal. concrete reservoir to F. Frost, Hanover.

STREETS AND ROADS

Proposed Work

Mass., Somerville—City plans to spend $25,000 to build new streets, $35,000 for permanent pavements, $65,000 for macadam paving and $25,000 to build sidewalks. H. E. Wemyss, aud.

N. J., Glen Ridge—Bd. Freeholders, Newark, soon receives bids paving Ridgewood Ave. F. Reimer, co. engr.

N. J., Irvington—Bd. Freeholders, Newark, soon receives bids paving Sandford Ave. F. Reimer, co. engr.

N. J., Montclair—Bd. Freeholders, Newark, soon receives bids paving Grove St. and Upper Montclair Ave. F. Reimer, co. engr.

N. J., Newark—County soon receives bids paving 3 streets. F. A. Reimer, co. engr.

N. J., New Brunswick—State Highway Comn. appropriated $110,000 to build roads in county.

N. J., Paterson—County receiving bids in July, improving Greenwood Lake Rd.

N. J., Summit—City plans to pave Summit Ave., concrete or other material. O. J. Swensson, city engr.

N. J., Trenton—City Comn. to sell $246,000 bonds to improve various streets and build 2 municipal buildings. J. R. Fell, Jr., city engr.

N. J., Weehawken—Union Hill Bd. Trade plans to pave Hudson Ave. and Gardner St., asphalt, also improve New York Ave.

Pa., Brownsville—Council plans to pave portion New Water St. C. W. Coulter, secy.

Pa., Johnstown—L. Franke, mayor, approved $25,000 bond issue to pave streets and $50,000 for paving and other improvements at Point Dist.

Pa., Lemoyne—City plans to pave Rossmoyne St., concrete. Address C. B. Nebinger.

Pa., Reading—Berks & Dauphin Turnpike Co. appropriated $75,000 to pave 28-mi. road from Wernersville to Hummeltown.

Del., Wilmington—City plans to pave Market St., asphalt. E. M. Hoopes, Jr., city engr.

W. Va., Merril—County soon lets contract building 24-mi. road.

Ga., Americus—City plans to pave 10,000 sq.yd. streets, concrete. J. B. Ansley, city engr.

Ga., La Grange—City plans to pave 60,000 sq.yd. streets. G. H. Sargent, city engr.

O., Ashland—R. R. Conn, city engr., submitted report estimating cost paving portion Virginia and East 4th St. at $19,982 and $5758 respectively. Noted May 24.

O., Berea—City plans to pave 3rd St.

O., Cincinnati—Council passed resolution to pave and improve Quebec and Madison Rds., Vineyard, Dunholter, Rockford and Gage Sts. F. Krug, city engr.

O., Cleveland—City plans to build sidewalks on various streets; also pave East 128th, East 143rd, East 157th, East 138th, East 160th, East 123rd Sts. and several other streets, Benham and Pythias Aves., brick, McElhattan Ave., brick, asphaltic concrete, or bitulithic. R. Hoffman, city engr.

O., Elyria—City plans to pave Ohio St. and portions Eastern Heights Blvd. and West Ave. C. M. Theobald, city engr.

O., Girard—City plans to pave Kline St.

O., Lima—City plans to pave several roads. J. T. Heffner, clk.

O., Sidney—City plans to pave various streets.

O., Springfield—City plans to pave portion Main St. M. J. Bahin, city engr.

O., Toledo—City plans to repave Dorr St. H. McKechnie, city engr.

Ind., Ft. Wayne—F. M. Randall, city engr., preparing plans paving 29 streets, including portion Smith, Lasalle, Liberty, Coombs, Tecumseh and Miner Sts., Dodge, Alabama, Riverside, Lake, Grace, South Wayne and Kinnaird Aves.

Mich., Alma—See "Sewers."

Ill., Freeport—A. Hepner, city engr., making surveys paving portion Galena and Locust Sts. and Lincoln Ave., asphalt or creosoted block.

Ill., Streator—City passed ordinance to pave Elm St. T. G. Evington, mayor.

Ill., Union—Town plans to spend $125,000 to build and improve roads in county, sand and clay. Address R. A. Easterling.

Wis., Appleton—County plans to spend $400,000 to build highways. W. F. Wolf, co. aud.

Ia., Council Bluffs—City plans to build sidewalks and curbs. E. V. Gustafson, clk.

Minn., Chaska—County to let contract in July building 30-mi. road.

Minn., Princeton—County soon lets contract building and improving 100-mi. road. About $150,000. J. D. Gray, highway engr. Noted Apr. 19.

Kan., Hutchinson—City plans to construct 15,000-ft. curb and gutter. C. L. McLane, city engr.

Kan., Lawrence—City preparing plans paving 7 blocks, brick, 30 ft. wide. A. Dunmire, city engr.

Neb., Omaha—City passed ordinance to repave 11th, 12th, 15th, Nichols, Howard and Jackson Sts. J. O. Bruce, city engr.

Neb., Red Cloud—City plans to pave 17,000-yd. and 4500-ft. curb and gutter, concrete or brick. Grant & Fulton, 510 Bankers Life Bldg., Lincoln, engrs.

N. D., Wahpeton—City Council soon receives bids paving 8th St.

Mo., California—City plans to pave streets in business section. H. B. Hardy, clk.

Mo., Dudley—City plans to pave number of streets. C. A. Hall, clk.

Mo., Independence—County soon lets contract resurfacing Independence Rd. between Independence and Kansas City. O. C. Sheley, co. engr.

Mo., Joplin—Co. voted $14,285 for concrete highway from Joplin to Miami, Okla.; about $65,000 now available for this work.

Mo., Sedalia—City plans to pave 12,000 yd. 13th St., concrete. F. T. Leaming, engr.

Mo., Sweet Springs—County plans election to vote on $75,000 bonds to build 9-mi. link, Sedalia-Lexington Rd., Sweet Springs Rd. Dist. Address Co. Clk., Marshall.

Ark., Camden—Engineers of State Highway Dept., Little Rock, making surveys building road from Camden to west line of Lafayette Co.

Ark., Des Arc—County let contract about June 15 building 9-mi. macadam road from Prairie-Woodruff Co. line west through Des Arc. About $54,000. E. E. Washburn, co. engr.

Ark., Pocahontas—(Official)—County soon receives bids building 35-mi. macadam road from Pocahontas to Missouri state line. About $126,000. J. D. Wells, comr.

Tex., Dallas—Comrs. Court of Dallas Co. adopted recommendations of J. F. Witt, co. engr., for expenditure of $500,000 for construction of concrete roads; specifications for proposed work are being prepared and bids will be received latter part of July. Work as outlined by engineer is as follows:

Dallas-Ft. Worth Rd.—Aside from making all bridges permanent, provision is made for portland cement concrete pavement from end of new embankment of Commerce St. viaduct to foot of Obenchain Hill in West Dallas, 1½ mi.; same type of pavement provided for section of road through Mountain Creek bottom, 1.45 mi., cost $73,424.

Dallas-Coppell Rd.—Permanent bridges to replace all timber bridges portland cement concrete pavement, 18 ft. wide from intersection with West Dallas pike to foot of Hasty Hill, 2 mi. from point where Eagle Ford Rd. intersects this road across bottom lands of West Fork of Trinity River to foot of Britain Hill, raising road above high water with earth embankment, gravel surfacing and 1000 lin.ft. concrete bridging covering 1.8 mi., cost $106,653.

Streets and Roads (Continued)

Dallas-Denton Rd.—Replace all timber bridging either with steel or concrete, cost $16,500.

Preston Rd.—Repairs to bridging, $2000.

Richardson Rd.—Replacing timber culverts with concrete, $4900.

Garland Rd.—Replacing timber bridges with either steel or concrete, portland cement concrete pavement 18-ft. wide through White Rock Creek bottom, 2000 ft., portland cement concrete pavement 16 ft. wide through Rowlett Creek bottom, and raised earth embankment with gravel surfacing through Muddy Creek bottom, cost $58,258.

East Pike—Replacing timber bridges and culverts with either steel or concrete, $26,700.

Dallas-Seagoville Rd.—Replacing all timber bridges and culverts with either steel or concrete, road which passes through White Rock Creek bottom to be raised above mean high water with earth embankment and 100 lin.ft of steel and concrete bridging, using gravel as surfacing material, cost $84,900.

Miller's Ferry Rd.—Replacing all timber bridges with either steel or concrete, including 700 lin.ft. of concrete bridging through Five Mile Creek bottom, cost $44,500.

Lancaster Rd.—Replacing all timber bridges and culverts with either steel or concrete, cost $16,500.

Beckley Rd.—Replace all timber bridges and culverts with either steel or concrete, $31,200.

Cedar Hill Rd.—Replace all timber bridges and culverts with either steel or concrete, $25,400.

Tex., Houston—County election June 27 to vote on $1,100,000 bonds to build and improve roads.

Tex., Houston—County election June 27 to vote on $1,400,000 bonds for resurfacing 235 mi. county highways. Noted Apr. 19.

Tex., Paris—(Official)—County plans election to vote on $900,000 bonds to build roads. Former election defeated. Noted May 17.

Okla., Ardmore—A. B. Payne, city engr., preparing plans estimating cost paving, curbing and guttering, drives and roadways, Whittington Park; also curbing and guttering west side city's new park, College Hill site.

Okla., Bristow—Citizens of Creek Twp. plan election June 8 to vote on $15,000 bonds to build roads.

Okla., Bristow—City plans to pave Main St.

Okla., Chandler—County election June 16 to vote on $60,000 bonds to build roads and bridges.

Okla., Frederick—City plans to pave South 10th St.

Okla., Hewitt—Town election June 23 to vote on $70,000 bonds to build and improve roads.

Okla., Holdenville—Citizens of Bernard Twp. voted $50,000 bonds to build roads.

Okla., Hugo—County election June 11 to vote on $50,000 bonds for roads in Willow Twp.

Okla., Miami—County plans election to vote on $500,000 bonds to build roads.

Okla., Stroud—Citizens of Keokuk Twp. plan election June 16 to vote on $60,000 bonds to build roads and bridges.

Okla., Tulsa—City retained Hare & Hare, landscape archts., Kansas City, Mo., and Brennan & Rooney, engrs., 25 Culbertson Bldg., Tulsa, to prepare plans for boulevard system which will include Sunset and Swan Parks residential additions together with Woodward, a city park. Boulevard will extend to Kendall College along river to waterworks which will be converted into park ground. Noted Apr. 26.

Idaho, Lewiston—City retained Sawyer Bros., engrs., White Bldg., Seattle, to prepare plans paving Main St. and Idaho Ave., et al. About $14,000.

Idaho, Pocatello—Council plans to pave 14 blocks North Garfield St. J. H. Giles, city engr.

Wash., Olympia—City to let contract in July paving ½ mi. streets. R. F. Wood, city engr.

Wash., Seattle—A. H. Dimock, city engr., submitted report to Bd. Pub. Wks. estimating cost paving Latona Ave. at $35,084.

Wash., Tacoma—Co. comrs. soon receive bids paving 10 mi. between Orting and Burnett. Cost between $135,000 and $160,000. D. H. White, co. engr.

Wash., Vancouver—Co. comrs. approved plans of B. L. Dorman, co. engr., paving River Rd., 24-ft. roadway, 16-ft. pavement, 2-ft. crushed rock shoulder on each end, 2-ft. dirt embankment, concrete, 6 in. thick, asphaltic concrete and bitulithic on 4-in. base. About $40,000 available.

Wash., Winlock—Council plans to pave and grade North 1st St., et al., concrete, wood block or some other hardsurfacing. About $12,000.

Ore., Astoria—Council soon receives bids clearing, grading, building trestles, etc., portion 18th St. About $18,000.

Ore., Newburg—Council plans to improve portion Franklin St., et al. About $12,000.

Ore., Nysa—Town plans to pave 2 mi. streets, concrete. C. C. Wilson, mayor.

Ore., Roseburg—C. C. Kelly, asst. state highway engr. made surveys, highway between Roseburg and Myrtle Point. About $100,000.

Ore., Salem—County soon receives bids paving portion Siskiyou Highway. About $65,000.

Cal., Auburn—City receiving bids in June paving business streets, concrete. About $45,000.

Cal., Fairfield—Bd. Supervs. receiving bids in July building 1st Sect. of highways to be constructed under $500,000 bond issue.

Cal., Fresno—City plans to improve portions Iowa and White Bridge Sts. B. E. Cronkite, city engr.

Cal., Los Angeles—City plans to pave portion Eagle, Atlantic and Lawrence Sts. H. Hamlin, city engr.

Cal., San Diego—City receiving bids about latter part June paving 25 blocks on A, Ash, Beech, Cedar, 7th, 8th and other streets. G. Cromwell, city engr.

Cal., San Francisco—City plans to extend and pave Parker Ave. About $75,000. M. M. O'Shaughnessy, city engr.

Cal., Visalia—B. Lovelace, co. surv., prepared plans building 8 mi. highway from Exeter to Lindsay. Bids will soon be received.

Ont., Magog—See "Sewers."

Ont., Mitchell—City having plans prepared building macadam roads. Bids will soon be received. Address W. A. Ryan.

Ont., New Hamburg—Town Council soon receives bids paving various streets, concrete. About $15,000.

BIDS DESIRED

N. Y., New York—Until June 15 by M. M. Marks, boro. pres., regulating and repaving portions Pine, Macdougal, 19th, 35th, 48th, 57th and Monroe Sts., 6th, Lexington and Lenox Aves.

N. J., Belvidere—(Official)—Until June 20 by Bd. Chosen Freeholders completing 4107-mi. Washington-Buttzville Rd., Sect. 1; advertised in this issue.

N. J., Camden—Until June 18th by Highway Dept. paving portion Coates Ave., 8-in. concrete. F. S. Vanhart, chn.

N. J., Jersey City—Until June 14 by Bd. Comrs. paving Hutton St., belgian block. F. A. Dolan, clk.

N. J., Newton—(Official)—Until June 13 by Town Com. building 5600 sq.yd. concrete pavement, 1700 lin.ft. curbing 1100-cu.yd. excavation; advertised in this issue.

N. J., Roselle Park—Until June 15 by Mayor and Council improving Webster Ave.; plans include 4431-sq.yd. concrete pavement, bituminous surface 2040 lin.ft. blue stone curbing, etc. J. Wallace, boro. engr.

N. J., Wildwood—Until June 19 by County rebuilding Holley Beach Rd. L. M. Rice, Cape May, co. engr.

Md., Baltimore—(Official)—Until June 12 by State Rds. Comn. building roads in various counties; advertised in this issue.

W. Va., Hamlin—(Official)—Until July 2 by A. F. Black, co. clk., grading and hard surfacing 6-mi. roads. Noted May 31.

W. Va., Kingwood—Until June 16 by County building 15-ft. concrete road from Maryland line in Portland Dist. to Terra Alta and from Terra Alta to Pleasant Dist. line on Kingwood & Brandonville Pike. E. C. Everly, clk.

N. C., Clinton—(Official)—Until June 19 by Bd. Comrs. for street improvements; advertised in this issue.

O., New Junction—Official)—Until June 20 by Village paving, grading, curbing, building sidewalks and installing sewers in various streets; advertised in this issue.

O., New Philadelphia—Until June 11 by A. Nussdorfer, co. aud., for grading Leonard Rd., Jefferson Twp.

O., Springfield—Until June 13 by City improving and paving portions Belmont, High and Columbus Sts. M. J. Bahin, city engr.

Ohio—Until June 14 by State Highway Comn., Columbus, repairing 106 mi. state roads and building 53 mi. new roads; about $1,042,614. C. Cowen, comr.

Ia., Mason City—Until June 11 by City, paving 17,314-yd. E. P. Wilson, city engr.

Mo., Bethany—Until June 12 by City paving 17,214-yd. E. P. Wilson, city engr.

Ark., Pine Bluff—(Official)—Until June 20 by Humphreys & Tovey, engrs. for district, 416 Citizens Bank Bldg., building 40-mi. bituminous macadam roads; advertised in this issue.

Okla., Oklahoma—Until June 9th by Fairlawn Cemetery Assn. building complete system of driveways, concrete, sheet asphalt, asphaltic concrete or gravel. Address F. S. Surts, 509 Patterson Bldg.

Utah, Salt Lake City—Until June 15th by city; paving in Paving Extension No. 135, East 3rd St., Extension No. 69, Canyon Rd., No. 111, 9th South St., cement sidewalks on California and 8th West Sts. S. Q. Cannon, city engr.

Ariz., Yuma—(Official)—Until June 12 by City, Paving 2nd Ave. and 1st St., also installing sewers, Sewer Dist. No. 2. S. F. Stanley, redr.

Wash., Wapato—Until June 11 by C. A. Norton, city clk., paving Wapato Ave., et al. About $22,147. Noted May 17.

Cal., Red Bluff—Until June 12 by H. G. Kuhn, co. clk., paving Kauffman Causeway.

B. C., Trail—(Official)—City receiving bids in June installing 4-mi., 15- and 8-in. sewers. About $40,000. A. L. McCulloch, Nelson, cons. engr. Noted May 31.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Great Barrington**—Massachusetts Highway Comn., Boston, let contract building section public road to Lane Constr. Co., 37 Colony St., Meriden, Conn., $23,623.

N. Y., Albany—State Comn. Highways, 55 Lancaster St., received low bids May 28, repairing highways in various counties as follows: Repair contract No. 1113, roads Nos. 198 and 566, Albany Co., S. B. Van Wageneni, Inc., Rondout, $37,440; Lane Constr. Corp., Meriden, Conn., $38,491; W. L. Lawton, Glens Falls, $40,948. Repair contract No. 1040, road No. 684, Cayuga Co., E. M. Harvie, Savannah, $10,665; G. C. Hill, Fulton, $11,301. Repair contract No. 1091, roads Nos. 341 and 649, Columbia Co., John A. Jova, Inc., Newburgh, $44,701. Repair contract No. 1111, road No. 5368, Greene Co., H. Miller, Albany, $6,065; C. I. Scheontag, Saugerties, $61,769; J. Walker, Albany, $62,235. Repair contract No. 1068, roads Nos. 460, 461, 463, 465, 466, 471-830-5466 and 5524, Herkimer Co., Newport Constr. Co., Herkimer, $20,631. Repair contract No. 1106, Road No. 643, Niagara Co., Greece Constr. Co., Rochester, $29,918; F. L. Cohen, Buffalo, $32,877. Repair contract No. 1089, road No. 5576, Ontario Co., Greece Constr. Co., Rochester, $41,837; Dale Engr. Co., Utica, $42,411. Repair contract No. 1044, road No. 390, Orleans Co., Greece Constr. Co., Rochester, $15,300; C. A. Ingersoll, Medina, $19,300. Repair contract No. 1099, road No. 678, Otsego Co., S. K. Johnson, Norwich, $17,495. Repair contract No. 1116, roads Nos. 981 and 5196, Rensselaer Co., Belmar Contr. Co., Troy, $18,236; W. L. Lawton, Glens Falls, $18,829; J. B. Dower, Ballston Spa., $18,936. Repair contract No. 1114, road No. 1018, Suffolk Co., R. W. Smith Corp., New York City, $11,482. Repair contract No. 1101, road No. 794, Suffolk Co., R. W. Smith Corp., New York City, $37,968; Estate of Louis Balbuzzi, Huntington, $43,695. Repair contract No. 1110, roads Nos. 231 and 316, Ulster Co., De Graff & Hogeboom, Inc., Kingston, $11,326. Repair contract No. 1102, roads Nos. 34, 52 and 53, Westchester Co., F. L. Cohen, Buffalo, $115,858; Oswego Constr. Co., Inc., Dayton, $116,889; E. T. Eggleston, Yonkers, $116,941. Road No. 1484, Phila. Village: North and South Main Sts., Jefferson Co., 0.66 mi., Ross Bros., Copenhagen, $13,037; Pathfinder Constr. Co., Fulton, $13,562. Road No. 1332, Claverack-Chatham, Part 3, Columbia Co., 7.77 mi., R. A. Felton, Albany, $50,546. Noted May 17.

N. Y., New York—(Official)—M. M. Marks, boro. pres., received low bids paving (a) various streets in Manhattan, (b) portion Broome St., (c) Academy St., (d) 86th St., (e) Jefferson St., (f) Central Park Transverse Rd., No. 4; from Sicilian Asphalt Paving Co., 41 Park Row, (a) $63,960, (d) $36,209; Cleveland Trinidad Paving Co., 420 Lake Side Ave., N. E., Cleveland, (b) $52,205, (d) $36,331; Cramer & Leedke, (c) $35,340; W. J. Fitzgerald, 547 West 45th St., (e) $14,160, (f) $36,418.

Streets and Roads (Continued)

★**N. J., Bayonne**—City Comn. let contract paving 12 streets, asphalt and macadam, to W. T. Crichfield, 54 5th St., Hoboken, $150,000.

N. J., Jersey City—Boulevard Comn. received low bid paving Sect. 7, Hudson Co. Blvd., from W. T. Crichfield, 54 5th St., Hoboken, $96,881.

★**N. J., Newark**—Bd. Pub. Wks. let contract paving Prince St. wood block, to Atlas Contr. Co., Essex Bldg., Newark, $23,580; White Terrace, asphalt, to Northern Constr. Co., 665 Broad St., $5802. Noted May 31.

★**N. J., Orange**—(Official)—City let contract paving portion Center St. involving 9020 sq.yd. Hastings Asphalt Blocks to L. Batt, Orange St., South Orange, $29,771.

★**N. J., Rutherford**—Bd. Freeholders let contract paving portion Rutherford Ave. to G. B. Belcher, 257 Passaic St., Hackensack.

★**N. J., West New York**—(Official)—City let contract paving portion Jackson St., involving 2224 sq.yd. Hastings Asphalt Blocks, to G. J. Hornung, 513 16th St., $14,389.

★**Pa., Johnstown**—County let contract paving road from Johnstown to Westmont, brick, to G. W. Clark, Johnstown, and Clay Mfg. Co., Winber, $17,102.

★**Pa., Phila.**—A. Datesman, dir. dept. pub. wks., let contracts paving various streets: (a) asphalt, (b) vitr. block, (c) wood block, (d) granite blocks, (e) macadam, (f) bituminous, as follows: Barber Asphalt Co., Land Title Bldg., portion Dilworth St., (a) $4083, Lycoming Ave., (a) $2216; Phila. Paving Co., 1345 Arch St., Ludlow St., (a) $2938; Cunningham Paving & Constr. Co., 1345 Arch St., Berkeley and Apsley Sts., (b) $14,088; J. Meehan & Sons, 915 West Dauphin St., Camac St., (c) $1420, Germantown Ave., (d) $20,893; J. J. McHugh, 1430 South Penn Sq., Woodland Ave., (d) $80,000; P. J. Snyder & Co., Bailey Bldg., Delmar and Lamont Sts., (e) $10,205, Fanshawe St., (e) $6252; Gates St., (e) $7097; Wissahickon Ave., (e) $6300; Curtis Bros., Magee and Tordesdale St., Jackson St., (e) $3062; Eastern Paving Co., 1416 South Penn. Sq., Torresdale Ave., (f) $41,752.

★**Va., Winchester**—(Official) — City let contract resurfacing and treating with Tarvia seal coat 150,000 sq.yd. macadam roads to Tarvia Co. About $10,000. Noted May 17.

★**N. C., Hickory**—(Official)—City let contract paving 40,000 sq.yd. sheet asphalt to Ely Constr. Co., Charlotte, $60,000. Noted May 1.

★**S. C., Beaumont**—(Official)—City let contract paving 13,000 sq.yd. and 6000 ft. curbing to Southern Clay Mfg. Co., James Bldg., Chattanooga, $21,390. Noted May 4.

★**Ala., Birmingham**—City Comn. let contract paving 8300 sq.yd. 24th St., S., to Dunn Constr. Co., Chamber Commerce Bldg., $14,000.

★**Miss., Clarksville** — (Official) — City Comrs. let contract paving 30,000 sq.yd. asphaltic concrete, 700 lin. ft. curb and gutter, inlets, etc., to Memphis Asphalt & Paving Co., 811 Falls Bldg., Memphis, $66,000. Noted May 17.

★**La., Crowley**—State Highway Dept. let contract Crowley-Jennings Highway to Perry-Bonner Co., Alexandria, $51,000.

★**La., Shreveport**—Police Jury let contract Bethany Rd. to Hall Nattin, Shreveport, $32,413; Jefferson Rd. to Gray Stinson, Shreveport, $2332; roads in Vivian-Lewiston-Trees City to J. B. Willis, Greenville, Tex., $11,060. Noted May 10.

Ky., Catlettsburg—County received low bids building roads from G. B. Carey, Lexington.

O., Columbus—Co. Comrs. received low bids paving Doylestown-Easton Rd. from Hart & Kemp, Elyria, $45,000.

★**O., Dayton**—(Official)—Co. Comrs. let contract paving Central Ave., brick to Bigler Bros., Middletown, $23,112. Noted May 17.

★**O., Dayton**—(Official)—Co. Comrs. let contract paving portion Keowee St. to J. Wroe, 435 Grafton Ave., $52,000. Noted May 17.

★**O., Johnstown** — (Official) — E. H. French, village clk., let contract improving portion Coshocton St. to Keely & Bolin, Newark, $19,699. Noted May 17.

O., New Kensington—Co. Comrs., Greensburg, let contract 1½-mi. road to Rinehart Bros., East Liverpool, $58,334.

★**O., Toledo**—(Official)—County let contract rebuilding Jerusalem Rd. and resurfacing Detroit Ave., No. 11, and Central Ave., No. 21 to Barrett Co., Toledo. Noted May 17.

★**Ind., Anderson**—County let contract paving 2 mi. Madison Rd. to Daniels & Lyst, Anderson.

★**Ind., Danville**—Co. Comrs. let contract building 3-mi. macadam road to Hurst-Sweet & Co., $20,000.

★**Ill., Bloomington**—Bd. Local Improv. let contract paving portion West Walnut St. to I. D. Lain, Bloomington, $14,439; building concrete walks during year to G. W. Bansau, 10½c. per sq.ft.

★**Ill., Jacksonville**—Bd. Local Improv. let contract building and improving South Main St. to J. E. Bretz, 224 East Union St., Springfield, $13,995.

★**Wis., Menasha**—City let contract paving 1st, 2nd and Tayco Sts. to Rasmussen & Sons, Oshkosh, $38,000. Noted May 10.

★**Wis., Shawano**—(Official)—County will grade and gravel roads by day labor. Noted May 24.

★**Minn., Hibbing**—Co. Comrs. let contract building Smith Rd., Stuntz Twp. to Malmquist Bros., Hibbing, $17,000.

★**Minn., St. Paul**—City let contract (a) grading and building retaining walls, (b) bridge, (c) underpinning building caused by opening of 9th St. from Smith to Summit Aves., as follows: Thornton Bros., 1312 Snelling Ave., (a) $40,687; W. J. Hoy, 700 Metropolitan Bldg., (b) $9119, (c) $12,019.

★**Kan., Downs**—City let contract paving 30,000-yd. brick, to McGuire & Stanton, Leavenworth, $80,000. Noted May 3.

★**Kan., Hutchinson**—City let contract paving Hyde Park to Stamey-Mackey Constr. Co., $36,820.

★**Kan., Hutchinson**—County let contract grading and graveling to Wheeler & Kelecher, Garden City, $36,840.

★**Kan., Topeka**—(Official)—City let contract paving 11,500 sq.yd. brick to Ritchie Bros., Topeka, $32,547. Noted May 10.

★**N. D., Fargo**—County let contract building 71-mi. highway to Threadwell Twichell, Mapleton, $22,795.

★**N. D., Fargo**—City let contract paving 8th St. and 7th Ave. to C. T. Welsh & Co., 2628 Humboldt Ave., S., Minneapolis, $37,995.

★**Ark., Clarksville**—(Official)—Bd. Comrs. Paving Dist. No. 1, let contract 15,790 sq.yd. concrete or asphaltic concrete pavement, 8200 ft. curb and gutter and 1200 ft. 15- and 18-in. storm sewers to Taylor, Walker & Bell, Maxahachie, Tex., $30,551. Noted May 10.

★**Ark., Jonesboro**—City let contract paving 15-mi. streets to Kaw Paving Co., Topeka, Kan., $300,000. Noted May 10.

★**Okla., Ardmore**—City let contract paving E St. to Struble & Mitchell, Pauls Valley, $42,350. Noted May 17.

★**Idaho, Kellogg**—City let contract paving streets, concrete, to C. M. Payne, Spokane, $14,771.

★**Utah, Salt Lake City**—City let contract paving 9th South St. to P. J. Moran, Inc., Felt Bldg., $29,286.

★**Wash., Montesano** — (Official) — Co. Comrs. let contract paving Permanent Highway No. 14 to Grays Harbor Constr. Co., Hoquiam, $40,426; East Hoquiam Rd. to R. Henry, Aberdeen, $12,877. Noted May 10.

★**Wash., Seattle**—Bd. Pub. Wks. let contract paving Occidental Ave., et al., to McGuire Bros., 523 1st Ave., $73,315. Noted May 31.

★**Wash., Seattle**—Co. comrs. let contract paving Northeast Diagonal Rd. to Washington Paving Co. L. C. Smith Bldg., $192,800. Noted Apr. 19.

★**Wash., Sunnyside**—Council let contract paving streets, business district, bitulithic, to Warren Constr. Co., Journal Bldg., Portland, Ore., $62,629.

★**Ore., Portland**—City let contract paving Willow and Madison Sts. to Warren Constr. Co., 14-16 Asso. Bldg. About $10,000. Noted May 4.

★**Ore., Roseburg**—County let contract paving 4000 yd. Pacific Highway to O. T. Larson, Roseburg.

★**California**—(Official)—State Highway Comn., Sacramento, let contracts building roads in counties as follows: Alameda Co., Div. 4, Route 5, Sect. B, to Bates, Borland & Ayer, Oakland Bank of Savings Bldg., Oakland, $29,306; Siskiyou Co., Div. 11, Route 3, Sects. A & B to J. H. Mays, Napa; Los Angeles Co., Div. 7, Route 4, Sect. C to Brashear-Burns, Hollywood, $28,903; Santa Barbara Co., Div. 5, Route 2, Sect. E to I. Hodson, San Luis, Obispo, $59,950; Solano Co., Div. 3, Route 8, Sect F to Harlan & Harlan, Williams, $26,977. Noted May 31.

★**Cal., Bakersfield**—Bd. Supervs. let contract improving 8.32-mi. Div. 10, Sect. 11, Weed Patch Loop, to L. G. Garnsey, 514 Central Bldg., Los Angeles, $68,780; 10.81-mi. Div. 2, Sect. 1, Wasco-McFarland Rd. to G. S. Benson & Son, 521 Stimson Bldg., Los Angeles, $44,548.

★**Cal., Oxnard**—City let contract paving various streets, bitulithic on bituminous base, to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $104,557.

★**Cal., Sacramento**—Co. Comrs. let contract building H St. Highway to Burns, Jacinto & Da Rosa, Sacramento, $59,892; Sacramento-Freeport Highway to Contra Costa Constr. Co., 2323 Shattuck St., Berkeley, $27,043.

★**Cal., Ventura**—Bd. Supervs. let contract paving, grading and building rein.-con. culverts as follows: 4½ mi. to Fairchild-Gilmore-Wilton Co., Pacific Electric Bldg., Los Angeles, $16,040; 4.11 mi. to C. H. Hudson, 408 Marsh-Strong Bldg., Los Angeles, $14,081; 1.74 mi. to A. Holloway, 471 South Bway., Pasedena, $9416.

Cal., Watts—City received low bid 94,288 sq.ft. Topeka surfacing, 4012 lin.ft. cement curb, 12,167 sq.ft. cement sidewalks, 2042 lin.ft. 8-in. vitr. pipe, sewer, etc., in Main St. from T. H. Heinauer, Watts, $22,810.

RAILWAYS—STEAM & ELECTRIC

Proposed Work

New Jersey—Bd. Pub. Utility Comrs. granted permission to New York Central R.R. to issue $10,000,000 bonds, of which $7,778,503 is to reimburse treasury and $2,221,497 for improvements to system. G. W. Kittredge, Grand Central Terminal, New York City, ch. engr.

New Jersey—Jersey Central Traction Co. received franchise from City Council to construct and operate electric railway in South Amboy. T. W. Wilson, 603 Market St., Wilmington, Del., gen. mgr.

Pennsylvania—Cornwall & Lebanon R.R. plans double-tracking line from Lebanon to Conewago, also sidings in vicinity of Colebrook and Mt. Gretna. A. D. Smith, 143 Liberty St., Lebanon, pres. and genl. mgr.

Delaware—J. G. Gray, Market and 10th Sts., Wilmington, interested in standard-gage electric railway from Wilmington to Easton, Md., via Newark, Del.; Elkton, Chestertown and Centerville, Md., about 75 mi.

North Carolina—(Official)—J. A. Vandergrift, 115 Bway., New York City, will soon begin surveys on proposed railway from Shelby to Morgantown, 42-mi.

South Carolina—Columbia Railway, Gas & Electric Co. plans extension to prospective U. S. Army camp east of Columbia, between 5 and 10 mi. long. A. L. Kenyon, Arcade Bldg., Columbia, genl. mgr.

Georgia—Nashville, Chattanooga & St. Louis Ry. plans branch from Graysville to Ft. Oglethorpe, about 4½ mi. H. McDonald, Nashville, ch. engr.

Ohio—Ohio Traction Co. will construct new tracks in Wyoming (Cincinnati P. O.). About $60,000. T. Fitzgerald, Traction Bldg., Cincinnati, genl. mgr.

Montana—Chicago, Milwaukee & St. Paul Ry. plans line from Piedmont to Dillon, about 60 mi., to connect road with Oregon Short Line and affording direct outlet to southwest coast. C. F. Loweth, Chicago, ch. engr.

Texas—Houston & Texas Central R.R. soon receives bids for about 35,000 cu.yd. grading for constructing roadbed, spur track 4 mi. long near Richmond. W. E. Costello, Ennis, supt.

Oklahoma—Atchison, Topeka & Santa Fe Ry. plans to extend line from Ralston to Owen, via Pawhuska, and through oil fields. C. F. W. Felt, Chicago, ch. engr.

Arizona—Prescott & Phoenix Short Line R.R., recently incorporated with $2,500,000 capital stock, plans 50-mi. railway from Glendale, Maricopa Co. to southerly terminus of Atchison, Topeka & Santa Fe R.R.'s branch at Turkey, Yavapai Co. E. P. Hervey, 34 Nassau St., New York City, and R. E. Sloan, Phoenix, incorporators.

California—Howard Terminal Co., recently organized, will construct several miles railway along water front at Oakland to connect Western Pacific with Southern Pacific Lines. S. H. Boardman, 2820 Bway., San Francisco, promotor.

Ontario—Toronto Street Railway plans branch line from Queens St. Bridge to Ash-

Railways (Continued)

bridges Bay, Toronto. About $175,000. R. J. Fleming, 92 King St., Toronto, mgr.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**North Carolina**—Shelby Northern Ry. let contract line from Shelby to Casar, via Fallston, 22 mi., including frame trestles, to Cleveland Constr. Co., Shelby.

★**Kansas**—Atchison, Topeka & Santa Fe R.R. let contract branch line from Holyrood to Galacia, about 35 mi., to be known as Barton Co. & Santa Fe R.R., to J. R. Scott, Lubbock, Tex.

EXCAVATION AND DREDGING

Proposed Work

O., Warren — Flood Prevention — City passed ordinance to issue $25,000 bonds for straightening and dredging Mahoning River. G. T. Hecklinger, clk.

Minn., Jackson — Ditch — County sold $93,000 bonds to build Judicial Ditches Nos. 38, 48 and 53. P. D. McKellar, co. aud.

Tex., Beaumont—Canal—Beaumont Navigation Dist. will hold election in July to vote on $300,000 bonds for deepening ship canal to 27 or 28 ft. L. J. Black, chn. citizens com., interested.

Tex., El Paso—Irrigation—Land owners in El Paso Valley will create new irrigation district. Z. T. White, J. A. Smith and C. N. Bassett, bd. of dirs.

N. M., Artesia—Drainage—Lake Arthur D. D. will sell $200,000 bonds for drainage. A. C. Keinath, secy.

Cal., El Centro—Irrigation—Imperial Irrigation Dist. voted $2,500,000 bonds for improving system, amount to be expended as follows: $500,000 for raising Volcano Lake Level and strengthening Saise Levee; $100,000 for purchasing 3 locomotives, 80 dump carts, track steam shovels and equipment; $225,000 for constructing Cerro Prieta Canal and establishing rock quarry; $81,000 for Alamo waste gate; $80,000 for controlling gate in main canal and $100,000 for enlarging and repairing main canal. Emergency work is now being done and will be paid for out of this bond issue. F. H. McIver, secy. of dist. C. K. Clarke, ch. engr.

Cal., Los Angeles—Dredging—F. M. Lockwood, mgr. city operating dept., soon receives bids dredging about 116,000 cu.yds. in bay fronting on city tidelands.

Cal., Tracy—Irrigation — State Water Comm., Call Bldg., San Francisco, granted permit to West Side Irrigation Dist. to use 220 cu.ft. per second of waters of Old River, tributary to San Joaquin River, to be diverted at point near Bethany to irrigate 11,377 acres in newly formed district.

Cal., Yreka—Irrigation—State Engr. Dept reported in favor of Scott Valley Irrigation Dist. Land owners will now form district to irrigate about 5558 acres.

BIDS DESIRED

Ind., Rochester—Ditch—Until June 12 by M. Bay, constr. comr. for William Johnson Ditch, about 40 mi. long; dredge work about 18 mi. and tile about 22 mi., ranging from 10 in. to 30 in.

Ill., Beardstown—(Official)—Drainage—Until June 18 by Comrs. Coal Creek Drainage and Levee Dist. for drainage ditches; advertised in this issue.

Ill., Mason City — Drainage — See "Sewers."

Mo., Rockport—Drainage—Until June 14 by B. B. Hurst, engr., North Nishnabotna D.D., Rockport, 2-mi. drainage ditch, 24-ft. bottom, 1 to 1 slope, about 85,000 yd.

Cal., Manteca—Dams—Until June 12 by Bd. Dirs. South San Joaquin Irrigation Dist., auxiliary dams at Woodward reservoir.

N. B., St. John—(Official)—Excavation, etc.—Until June 11 by R. W. Wigmore, comr. water and sewerage, laying 5000 ft. 24-in. c. i. pipe (jointing by city) in Manawagonish Rd., laying pipe (city furnishing pipe and castings on ground), and about 35 cu.yd. rock excavation and 100 cu.yd. earth excavation. About $40,000. Noted May 10.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Ia., Charles City**—Drainage—County let contract open work to L. C. Hanson, Charles City, $14,000; tile Cement Products Co., Spencer, $40,000.

★**Ia., Ft. Dodge**—(Official)—Drainage—County let contract County Drain No. 227 to Anderson & Empire, Marshalltown, $25,031. Noted May 10.

★**Ia., Ft. Dodge** — (Official) — Drain—County let contract Boone Webster Joint Drain No. 2-222 to Hoover Lumber Co., Dallas Center. About $10,000. Noted May 17.

★**Minn., Benson**—(Official)—Ditch—Co. let contracts Judicial Ditch No. 5 as follows: Sects. 30, 31 and 32, open work, to Constr. Co., 206 Alworth Bldg., Duluth, $51,285, $48,578 and $27,042 respectively; Sect. 33, Frederick & Barnard, Minneapolis, $26,292; furnishing tile labor complete, Carey-Kelleher Ditch Co., Pocahontas, Ia., $171,951; tile complete, 153 mi. of 5-in. to 30-in., W. C. Markland & Co., Starbuck, $147,000 on ditch line; bridges to Iowa Bridge Co., 717 McKnight Bldg., Minneapolis, $14,349. Noted May 10.

★**Minn., Luverne** — (Official) — Ditch — County let contract Judicial Ditch No. 3 to Hanley & Flaherty, Vincent, Ia., $20,175. Noted May 17.

★**Minn., Stillwater** — (Official) —Ditch — County let contract Judicial Ditch No. 1 to J. M. Banta, Wyoming, Minn., $16,452. Noted May 17.

★**S. D., Clear Lake**—(Official)—County let contract drainage ditch to F. W. Kruger, Clear Lake, $13,000. Noted May 10.

INDUSTRIAL WORKS

Proposed Work

Mass., Pittsfield—General Electric Co., Oliver Bldg., plans 2 additions, each 3-story, 75 x 150-ft.

N. Y., East Hampton—B. G. Lewis, comr. dept. corrections, Municipal Bldg., New York City, had plans prepared by C. B. Meyers, archt., 1 Union Sq., New York City, for power house, laundry and storage building. About $200,000.

N. Y., New York—Swift & Co., 32 10th Ave., plans 4-story, 100 x 103-ft. cold storage and office building at 14th St. and 10th Ave.

N. J., Irvington—Kraeuter & Co., 18th St., Newark, plans 2 1-story, tool and steel shops, 322 Nye Ave. About $42,000.

N. J., Paterson—F. L. Atherton Machine Co., 17 Market St., manufacturer of textile machinery, plans 4-story, brick and concrete plant, Mill St. and McBride Ave. About $50,000. E. R. Coe, Romaine Bldg., archt.

Pa., Juniata—C. D. Brinser, div. engr. middle division, Pennsylvania R.R., Logan House, soon receives bids for tank shop. About $350,000.

Pa., Phila.—See "Reinforced Concrete."

Pa., Phila.—Fabric Leather Corp., c/o Tooker, Kolff, Cavis Co., 1418 Walnut St., retained Simon & Bassett, archts., 1112 Chestnut St., to prepare plans factory and power plant in Frankford section. About $50,000.

Md., Baltimore—Maryland Shipbuilding Co., Lexington Bldg., plans shipbuilding plant at Bear Creek. Bids will soon be received. About $750,000. C. E. F. Clark, pres.

N. C., Leakesville—Thread Mills Co. having plans prepared by F. P. Sheldon & Sons, engrs., Industrial Trust Bldg., Providence, R. I., for 2-story, 160 x 200-ft. knitting mill. About $160,000.

La., Pickering—W. R. Pickering Lumber Co. will build sawmill plant consisting of 3 buildings, 60 x 200 ft., 40 x 50-ft., and 30 x 80 ft. About $100,000.

La., Shreveport—S. R. Wells, 1333 College Ave., Indianapolis, will build glass factory here. About $75,000.

O., Cincinnati—Diem & Wing Paper Co., 8th and Eggleston Aves., plans 5-story, 31 x 70-ft. garage and power plant. Tietig & Lee, archts., 4th Natl. Bank Bldg., soon receives bids.

★**O., Cleveland**—Atlas Brass Mfg. Co., 332 Lakeside Ave., soon lets contract 3-story factory, Superior Ave. and East 34th St. Christian Schwartzenberg & Gaede, archts., 1900 Euclid Ave., prepared plans. Noted May 10.

O., Cleveland—Ideal Tire & Rubber Co., 503 Union Bldg., retained W. C. Owen & Co., archts., 407 Euclid Bldg., to prepare plans for plant. About $100,000. E. R. Davies, mgr.

O., Cleveland—New York, Chicago & St. Louis R.R. plans 2 freight houses, 78 x 433-ft., and 48 x 272-ft., at 2669 and 2683 East 9th St. About $60,000. E. E. Hart, Cleveland, ch. engr.

O., Cleveland—F. B. Stearns Co., Euclid and Lakeview Sts., plans brick, steel and concrete addition to plant. About $500,000. A. Garfield, archt., 915 Garfield Bldg., preparing plans.

O., Fostoria—Allen Motor Co. had plans prepared by H. Jones, archt., Galion, for 2-story, 100 x 1000-ft. automobile manufacturing plant. About $300,000. W. C. Allen, mgr.

Ind., Hammond—Railway Motor Car Co. plans addition to machine shop and foundry. About $50,000.

Mich., Detroit—Covert Gear Co., Lockport, N. Y., plans factory in Detroit to specialize in heavy 4-piece transmissions. A. A. Gloetzner, mgr. sales, serv. and engr. will have charge of new factory.

Ill., Chicago—Krasberg Mfg. Co., 412 Orleans St., will build 4-story plant. About $150,000.

Ill., Chicago—J. C. Moninger, 900 Blackhawk St., had plans prepared by W. T. Hopper, archt., 2721 South Michigan Ave., rebuilding 5-story factory, 1531 Kingsbury St. About $100,000.

Minn., St. Paul—North American Lumber Co., Hampden and Wabash Aves., purchased site and plans addition. About $50,000.

Kan., Neodesha—Standard Oil Co. of Kansas, 5301 East 9th St., will enlarge and improve its plant here. About $300,000.

Mo., St. Joseph—Battreall Shoe Co., 4th and Jule Sts., having plans prepared by R. Meier, archt., 209 Lincoln Bldg., 7-story, 70 x 160-ft. plant. B. M. Calkins, secy.

Mo., St. Louis—Inland Machine Works, 800 Mound St., plans 2-story plant, main structure 70 x 430 ft. and 4 wings, 70 x 130 ft. each.

Tex., Beaumont—Beaumont Shipbuilding & Dry Dock Co. plans to build shipbuilding plant. J. W. Lind, Houston, pres.

Tex., Benjamin—Brazos-Wichita Copper Co., recently incorporated with $800,000 capital stock, will build 5 concentrating and 1 leaching plant. F. C. Hubbell, 807 Alamo Bank Bldg., San Antonio, pres.

Tex., Galveston—Seaboard Transportation & Shipping Co., Galveston, will build shipbuilding plant. About $300,000. T. J. Anderson, cons. engr. of firm.

Ariz., Glendale—Pacific Creamery Co., Tempe, plans condensing plant here. About $150,000. J. B. Cook, mgr.

Wash., Seattle—F. Waterhouse, Inc., Central Bldg., purchased site on tidelands and plans overseas shipping terminal, including 150 x 1000-ft. wharf and warehouse. About $500,000.

Wash., Spokane—Sperry Flour Co. plans flour mill with 1500 bbls. capacity per day. About $750,000.

Wash., Tacoma—Tacoma Shipbuilding Co., Tacoma, plans enlarging plants.

Ore., Warrenton—American Shipbuilding Co., Spokane, Wash., prepared plans shipbuilding plant here, including 3 shipways. About $400,000.

Cal., Fresno—Willys-Overland Co. plans automobile service plant, Van Ness Ave., 3-story, 100 x 150-ft.; will equip same for machine repair work. F. G. Hood, local mgr.

Cal., Los Angeles—Republic Motor Truck Co., Alma, Mich., plans assembling plant here. First unit will cost $150,000. D. F. Poyer, c/o D. F. Poyer Truck Co., local distributor, arranging for site.

Cal., Los Angeles—Royal Ascot Knitting Mills, Ashmead St., Germantown, Phila., negotiating for site in Los Angeles to establish branch mill. About $250,000.

Cal., Oakland—See "Miscellaneous."

Ont., Toronto—British Supply Co., 608 Excelsior Life Bldg., preparing plans abattoir and packing plant. About $5,000,000.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Mass., Boston**—See "Reinforced Concrete."

★**Mass., New Bedford**—Penrod Mills let contract 3-story, 125 x 150-ft. mill to F. H. Smith, 120 Bway., New York City.

★**Mass., Southbridge**—Hyde Mfg. Co., let contract manufacturing plant to Clark & Lee Co., 201 Devonshire St., Boston.

★**R. I., Pawtucket**—Potter & Johnson Machine Co., 1027 Newport Ave., let contract addition to machine shop to B. F. Smith Co., 22 Mason St., $50,000.

★**N. Y., New York**—Loft Candy Co., Broome and Center Sts., let contract alteration and additions to factory to J. H. Carl Co., 510 1st Ave., $80,000, on percentage basis. Noted Apr. 12.

★**Pa., Grantham**—S. R. Smith & Co. let contract 4-story, 40 x 200-ft. factory to Schmitt & Co., 180 North Penn. Ave., Wilkes-Barre.

Industrial Work (Continued)

★**Pa., Phila.**—American Metal Works, 313 Armat St., let contract plating, finishing and stamping shops, at central plating plant to Roydhouse, Arey Co., 112 North Road St., $100,000.

★**Pa., Phila.**—Nice Ball Bearing Co., 110 South Broad St., let contract factory to W. Steele & Sons Co., 30 South 15th St., $50,000.

★**Pa., Phila.**—Stead & Miller, 4th St., let contract plant to Furness Evans & Co., Franklin Bank Bldg., $100,000. Noted Apr. 5.

★**Del., Wilmington**—Harlan & Hollinsworth Corp., foot of West St., let contract 2 pipe shops and garage to F. A. Havens Co., 845 North 19th St., Phila., $100,000.

★**Md., Baltimore**—Pennsylvania R.R. let contract grain elevator to J. Stewart Co., Inc., Stock Exchange Bldg., Phila., $4,000,000.

N. C., Reidsville—American Tobacco Co., 111 5th Ave., New York City, will build 63 x 196-ft. addition to factory here, including boiler room. About $125,000. Work will be done under supervision of company's engineering dept. A. C. Ehrlich, Reidsville, ch. engr.

★**O., Cleveland**—C. Greve, 1840 East 93rd St., let contract factory to G. Rutherford, 2160 East 18th St., $80,000.

★**O., Cleveland**—Templars Motor Car Co., Rockefeller Bldg., let contract factory to Hunkin Conkey Constr. Co., Cuyahoga Bldg., $125,000.

★**O., Warren**—See "Structural Steel."

★**Wis., Milwaukee**—Armour Grain Co., 208 South La Salle St., let contract addition to grain mill to Fostor Constr. Co., Caswell Bl., Milwaukee, $50,000.

★**Kan., Salina**—Weber-Freeman Milling Co., Farmers Natl. Bank Bldg., let contract mill to Lehrack Constr. & Engr. Co., 725 Gloyd Bldg., Kansas City, Mo., $200,000.

★**Neb., Omaha**—See "Reinforced Concrete."

★**Mo., Kansas City**—Triangle Milling Co. let contract 1st unit of plant at Woodland and Armour Sts. to Wimmer Constr. Co., Victoria Bldg., St. Louis. About $125,000.

BUILDINGS

Proposed Work

Me., Waterville—Theater—Maine Theaters, Inc., c/o A. S. Block, Rockland, having plans prepared by J. Salmonson, archt., 36 Bromfield St., Boston, 1-story, 75x90-ft., brick. About $50,000. Bids will soon be received.

R. I., Woonsocket—School—Bd. Educ. having plans prepared by W. F. Fontaine, archt., Federal Bldg., for Fairmount School, $50,000 available. Noted May 31.

Conn., Ansonia—Bank—Ansonia Natl. Bank, 165 Main St., had plans prepared by Mowbray & Uffinger, archts., 56 Liberty St., New York City, 1-story, 45 x 60-ft. About $50,000.

Conn., Norwalk—Grammar School—Bd. Educ. having plans prepared by P. Sunderland and E. Watson, archts., Library Ave., Danbury, 2-story, 60 x 112-ft. About $50,000.

N. Y., Astoria—(Long Island City P. O.)—Parochial School—St. Joseph's Congregation soon receives bids, 4-story, 68 x 104-ft. brick and steel. Grand and 14th Aves. About $60,000. F. J. Berlenbach, 260 Graham Ave., Brooklyn, archt.

N. J., Garwood—School—Bd. Educ. having plans prepared by J. N. Pierson & Son, archts., Raritan Bldg., Perth Amboy, 2-story. About $60,000.

N. J., Hoboken—Schools—Bd. Comrs. will sell $679,176 bonds to build schools. D. A. Haggerty, city clk.

N. J., Newark—Theater and Hall—A. W. Moore, 22 Green St., plans, 2-story, 125 x 150-ft. About $65,000. H. Baechlin, archt., 665 Broad St., soon receives bids.

N. J., Trenton—See "Streets and Roads."

Pa., Archbald—High School—J. Murphy, secy. bd. educ., receiving bids about June 18, 2-story addition. J. J. Howley, Traders Bank Bldg., Scranton, archt.

Pa., Harrisburg—Schools—Bd. Educ., 121 Chestnut St., retained C. H. Lloyd, Telegraph Bldg., T. H. Hamilton, Patriot Bldg., and M. I. Kast, 222 Market St., archts., to prepare plans building 2 high schools, altering and constructing addition to high school, and addition to grade school. Estimated costs, $200,000, $75,000, $75,000 and $50,000 respectively.

Pa., Indiana—Memorial—Indiana Co. has plans prepared by J. T. Simpson, archt., Essex Bldg., Newark, N. J., 3-story, 60 x 80-ft. Soldiers Memorial Building. About $80,000.

Pa., Phila.—City will rebuild park buildings in Woodside Park recently destroyed by fire. About $200,000. C. Albright, city engr.

Pa., Scranton—Bank—3rd Natl. Bank, 118 Wyoming Ave., having plans prepared by E. Langley, archt., Scranton Life Bldg., 1- and 3-story. About $70,000.

Del., Wilmington—Home—B. P. O. E., Wilmington Lodge No. 307, will build at 1119 Market St., 5-story. J. D. Thompson, Jr., archt., Ford Bldg., prepared plans.

W. Va., Moundsville—(Official)—Bd. Educ. receiving bids in about 3 weeks for high school to cost $125,000, and grade school to cost $40,000. E. B. Frazheim, Schmulbach Bldg., Wheeling, archt. Noted May 24.

Fla., Vero—Club House and Beach Resort—G. H. Burrows Development Co., 526 Guardian Bldg., having plans prepared by Howell & Thomas, archts., 2032 Euclid Ave., Cleveland, 5- or 6-story. About $1,000,000. G. H. Buroughs, mgr.

La., Alexandria—University—Leland University retained Favrot & Livaudais, archts., Perrin Bldg., New Orleans, to prepare plans. About $100,000.

La., Morgan City—School—City voted $60,000 bonds to build school.

O., Alliance—Club and Store—Fraternal Order of Eagles, 647 South Liberty Ave., had plans prepared by W. W. Matchett, archt., Main St., 4-story, 40 x 110-ft., on Main St. About $100,000.

O., Barberton—Grade School—Bd. Educ. rejected bids. May not receive new bids until spring 1918. About $60,000. Harpster & Bliss, Nantucket Bldg., Akron, archts. Noted Apr. 26.

O., Cincinnati—Grade School—C. W. Handman, bus. mgr. bd. educ., 511 West Court St., soon receives bids 3-story, 75 x 130 x 215-ft., "L" shaped. About $200,000. S. Hannaford & Sons, Hulbert Blk., archts.

O., Hubbard—High and Grade School—Bd. Educ. had plans prepared by Miller & Son, archts., Dollar Bank Bldg., Youngstown, 2-story. About $110,000. A. J. Hammond, secy. Noted Apr. 19.

O., Lorain—Clubhouse—Aerie 343 F. O. E. will build. About $65,000.

O., Marion—Hotel—Fireproof Hotel Co. will receive bids about June 15, 3-story, 60 x 112-ft. Cost, $125,000. Thies & Thies, Davies Bldg., Dayton, archts. and engrs.

O., Mt. Vernon—Infirmary—Ohio Bd. of Administration, c/o T. E. Davey, Oak and 9th Sts., Columbus, soon receives bids 2-story. About $50,000. Richards, McCarty & Bulford, Hartman Bldg., Columbus, archts.

O., Plymouth—High and Grade School—Bd. Educ. had plans prepared by Althaus & Jones, archts., Market Bldg., Mansfield, 2-story addition. About $50,000. C. S. Walker, clk.

O., St. Paris—Grade and High School—Jackson Twp. plans 2-story, 130 x 160-ft. About $75,000. C. Sheets, archt., 319 New 1st Natl. Bank Bldg., Columbus, soon receives bids.

O., Toledo—Home—Lutheran Orphans' and Old Folks' Home, Seaman near Van Buren St., plans 3-story, 58 x 104-ft. About $50,000. T. Huber, archt., 751 Spitzer Bldg. soon receives bids.

Ind., Decatur—High School—R. D. Myers, pres. bd. educ., receiving bids in June, 2-story, 70 x 160-ft. About $100,000. O. Hoffman, Studebaker Bldg., Decatur, archt.

Ind., New Palestine—High and Grade School—Sugar Creek Twp. plans, 2-story. About $50,000. W. H. Garns, 818 Fletcher Trust Bldg., Indianapolis, archt.

Ill., La Salle—Hotel—F. W. Malthiessen plans 3-story, 68 x 120-ft. Marshall & Fox, archts., 706 Lincoln Pkway., Chicago, soon receives bids.

Wis., Ashland—Hospital—Ashland General Hospital c/o A. T. Pray, had plans prepared by H. Wildhagen, archt., Masonic Temple, 3-story, 42 x 100-ft. About $65,000.

Wis., Manitowoc—Club—B. P. O. Elks receiving bids about June 15, 2-story, 60 x 90-ft. About $50,000. L. E. Wedertz, exalted ruler, 908 St. Claire St., chn. of invest. com.; E. F. Miller, Dempsey Bldg., archt.

Ia., Ames—Armory—State Bd. Educ., Elkader, had plans prepared by Proudfoot, Bird & Rawson, archts., 810 Hubbell Bldg., Des Moines, 1-story, 200 x 400-ft., on Campus of Iowa State College. About $125,000. D. D. Murphy, Elkader, pres. Noted May 17.

Ia., Emmetsburg—Hotel—Hotel Co. having plans prepared by Sawyer & Watrous, archts., 401 Hippe Bldg., Des Moines, 3-story, brick and rein.-con. About $50,000. D. G. McCarty, secy.

Ia., Merrill—School—G. Simpson, secy. school bd., soon receives new bids, former bids rejected. G. L. Lockhart, 391 Endicott Bldg., archt.

Minn., Annandale—School—Ind. School Dist. No. 71 rejected bids, 2-story, 110 x 154-ft. New bids about March 1918. Cost $50,000. C. H. Parsons, 601 Phoenix Bldg., Minneapolis, archt.

Minn., Minneapolis—See "Reinforced Concrete."

Minn., Motley—School—Bd. Educ. retained W. L. Alban, archt., 347 Endicott Bldg., St. Paul, to prepare plans. Bonds were recently voted for work.

Minn., Princeton—High School—City voted $50,000 bonds to build high school. A. B. Gramer, clk.

Minn., St. Paul—Hotel—A. J. Cameron, Sherman Hotel plans. About $400,000.

Minn., Virginia—School—City voted $350,000 bonds to build school. C. E. Nystrom, archt., Palladio Bldg., Duluth, preparing plans. Noted May 10.

Kan., Ft. Scott—School—Bd. Educ. plans 2-story. About $80,000. W. Taussig, archt., Oklahoma, receives bids about June 25. Noted May 24.

Kan., Kansas City—Auditorium—City had plans prepared by Rose & Peterson, archts., Barker Bldg., 3-story, 125 x 130-ft. About $125,000. Noted May 24.

Neb., Clay Center—Court House—County will receive bids about July 1, 60 x 90-ft. About $72,000. W. F. Gernandt, Keeline Bldg., Omaha, archt.

N. D., Fargo—Bank and Office—Northwestern Savings & Loan Bank plans, 2-story, 50 x 140-ft. About $65,000. W. F. Kurke, archt.

N. D., Lawton—School—Bd. Educ. had plans prepared by I. Kasbo, archt., Devils Lake.

N. D., Minot—Hotel—Million Dollar Hotel Co., Inc., plans 9-story, 74 x 146-ft. About $450,000. G. H. Hoffman & Co., archts., 17 West College St., Rochester, Minn., receiving bids in August.

Mont., Butte—Hospital—St. James Hospital plans to build addition. About $75,000. W. D. Gillespie, archt.

Mont., Great Falls—High School—City to hold election June 23 to vote on $125,000 bonds to build junior high school. W. H. Harrison, clk.

Mont., Missoula—Theater—Jensen & Von Herberg, Seattle, plan. About $125,000.

Mo., St. Louis—Y. M. C. A. plans 3-story building. About $100,000. F. L. Williams, 3973 West Belleplaine Pl., chn. A. B. Groces, archt., 314 North 4th Ave., soon receives bids.

Okla., Bartlesville—Hospital—County voted $50,000 bonds to build hospital. J. C. Mitchell, clk.

Okla., Oklahoma—Temple—Masonic Orders plan. About $250,000. Puckey & Jenkins, Chicago, archts.

Colo., Denver—High School—School Bd. plans to issue bonds to build high school.

Wash., Bremerton—Theatre—M. Umbrecht, archt., Arcade Bldg., Seattle, soon receives bids motion picture theatre for Osman Amusement Ct. About $75,000. Noted May 24.

Cal., Esparto—See "Reinforced Concrete."

Cal., Los Angeles—Lodge—Elks Lodge plans, 10-story, Olive St. About $750,000.

Que., Montreal—School—W. O'Meara, 87 St. Catherine St., W., retained an architect to prepare plans for a brick and stone school for Bd. Educ. About $85,000.

BIDS DESIRED

Me., Portland—(Official)—School—Until June 14 by F. A. Tompson, archt., 537 Congress St., for brick addition, Spring and Oak Sts., for Maine School for Deaf.

Conn., Waterbury—(Official)—High School—Until June 11 by J. J. Fitzgerald, clk. bd. educ., brick rein.-con., granite and limestone, Grove and Pine Sts. Cost between $400,000 and $500,000. L. A. Walsh, archt. Noted May 17.

N. Y., Albany—Parish House—Until June 26 by Loth & White, archts., 130 State St., 2-story, 53x102-ft., brick and concrete, Central Ave., between Lexington and Robin Ave. Noted May 31.

N. Y., Beacon—(Official)—Hospital—Until June 12 by J. M. Carter, supt. prisons, Capitol, Albany, for addition to building for Women's Group at Mattewan State Hospital, Beacon.

N. J., Bayonne—School—Until June 14 by Bd. Educ. for 197x225-ft., brick and steel school in 3rd Ward. About $300,000. D. J. Anderson, 424 Ave. E, archt.

Buildings (Continued)

N. J., Newark — (Official) — Theatre, Store, Office and Lodge—Until June 8 by H. Baechlin, archt., 665 Broad St., for A. W. Moore, 22 Green St., owner. About $65,000. Noted May 31.

N. J., Weehawken—School—Until June 13 by West New York Bd. Educ., addition to School No. 5. N. Kuhlke, clk. W. Mayer, Jr., 711 Bline St., West New York, archt. Noted May 10.

Md., Baltimore—Theater—Until June 15 by H. W. Webb, Pkway Theatre Co., Fidelity Bldg., for addition. About $50,000. T. W. Lamb, 644 8th Ave., New York City, archt.

Mich., Monroe—School—Until June 11 by Bd. Educ. for Christiancy School. H. W. Wachter, 908 Nicholas Bldg., Toledo, O., archt. Noted Apr. 5.

Ia., Council Bluffs—School—Until June 9 by R. H. Williams, secy. bd. dirs., school on 2nd Ave. J. C. Jensen, 305 Bway., archt.

Ia., Ft. Madison—School—Until June 25 by Bd. Educ., 2-story, brick, stone and terra cotta. About $50,000. Owen & Payson, 202 Reliance Bldg., Kansas City, Mo., archts. Noted May 10.

Ia., Martinsburg—High and Grade School—Until June 20 by E. E. Cook, secy. bd. dir. independent school dist. G. M. Kerns, Commercial Club Bldg., Ottumwa, archt.

Minn., Deerwood.— Sanatorium — Until June 12 by Sund & Dunham, archts., 514 Essex Bldg., Minneapolis, for Crow Wing and Aitkin Cos.

Minn., Riverton—Grade and High School—Until July 1 by H. J. Smith, clk. school bd. A. Puck, 617 Torrey Bldg., Duluth, archt.

Neb., Franklin—(Official) — School—Until June 12 by Bd. Educ. School Dist. No. 33. Berlinghof & Davis, Security Mutual Bldg., Lincoln, archts.

S. D., Wessington Springs—High School—Until June 14 by C. H. Gall, clk. bd. educ. Edwins & Edwins, 911 N.W. Bldg., Minneapolis, archts. Noted May 31.

N. D., Wolford—School—Until June 20 by J. A. Gardner, pres. bd. educ. J. A. Shannon, Jamestown, archt.

Ore., Eugene — (Official) — Dormitory — Until June 13 by Bd. Regents, University of Oregon, for women's dormitory. Lawrence & Holford, 1021 Chamber of Commerce Bldg., Portland, archt.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★Mass., Boston—Theater—New Columbia Co., c/o M. Loew, 415 Washington St., let contract remodeling to Fleischman Constr. Co., 7 West 45th St., New York City and 294 Washington St., Boston, $250,000.

★Mass., Milton—Girls' School—Milton Academy, c/o W. B. Furber, let contract, 3-story, to Mitchell & Sutherland Co., 166 Devonshire St., Boston.

★Mass., Northbridge — Office — Whiting Machine Co. let contract to Stone & Webster Engr. Corp., 147 Milk St., Boston, $60,000.

★R. I., Providence—Hall, etc.—Providence College let contract, 68 x 228-ft. brick hall, 62 x 120-ft. auditorium and 72 x 172-ft. gymnasium, Easton St. to C. B. Maguire Co., 1205 Turks Head Bldg. Noted May 3.

★N. J., Bogota—School—Bd. Educ. let contract to J. E. Vroman Co., 140 4th St., Union Hill, $50,000.

N. J., Hoboken—School—Bd. Educ. received low bid Public School No. 3, Adams and 5th St., from J. Wayland, Garden St., $371,150. Noted May 17.

★Pa., Allentown — Hospital — Sacred Heart Hospital let contract brick addition to W. H. Brangewere & Co., Allentown, $180,000.

★Pa., Coatesville—Convent and Parochial School—St. Stanislaus Polish Congregation let contract, 2-story, 36 x 118-ft., to A. Ziornicke, 1632 Hunting Park Ave., Phila.

★Pa., Coatesville—Bank and Store—Natl. Bank of Chester Valley let contract to W. J. Elliott, Coatesville, $90,000.

★Pa., Scranton—Manual Training School—O. S. Johnson Institute, c/o R. B. Keller, Co. Savings Bank Bldg., let contract, alterations and addition, to Freda & Carlucci, 536 East Drinker St., Dunmore. $75,000.

★W. Va., Charleston — Institutional Church and Homes—Union Mission Settlement, Lovell and Clendennin Sts., let contract to Acme Constr. Co., Fleetwood Hotel, $50,000.

★W. Va., Ripley—Court House—Jackson Co. let contract remodelling courthouse to Prescott Constr. Co., Parkersburg, $67,133. Noted Jan. 13.

★Ga., Macon—Auditorium—City let contract to W. J. Beeland, Macon, $91,669. Noted May 24.

★O., Columbus—Home—Elks Lodge, c/o J. G. Price, 1356 Neil Ave., let contract addition to R. H. Evans & Co., Columbus Savings & Trust Bldg., $50,000.

★O., Massillon—Nurses' Home—Massillon City Hospital let contract to A. F. Wendling Co., McClymond Bldg., $50,000. Noted May 17.

★O., Toledo—School—Bd. Educ. let contract Sherman Ward School to H. J. Spieker Co., 409 Michigan St., $335,417.

★Mich., Cadillac — (Official) — School — Henderson Twp. let contract consolidated school to Cadillac Cabinet & Constr. Co. Noted May 10.

★Mich., Saginaw—Convent—Sisters of Mercy let contract, on Bridge St. hill, to J. McNabb & Son. About $200,000.

★Ia., Ames—School—Bd. Educ. let contract to R. H. Fisher, Cedar Rapids.

★Ia., Boyden—School—Bd. Educ. let contract to Standard Constr. Co., 1101 Plymouth Bldg., Minneapolis.

★Ia., Mason City—Church—1st Christian Congregation let contract to W. O'Neil & Son, Faribault, Minn., $80,000.

★Minn., Lanesboro—School—Bd. Educ. let contract to L. P. Jorgenson, 1930 St. Anthony Ave., St. Paul, $52,735.

★Kan., Hoxie—Court House—County let contract to G. Cope, 4900 Oak St., Kansas City, Mo. $60,000.

★Kan., Wichita—Home—Kansas Masonic Assoc. let contract to Dieter & Wenzel, 230 West Lewis St. $250,000.

★Neb., Omaha — Clubhouse — Athletic Club, Douglas St., let contract to Selden-Breck Constr. Co., Fullerton Bldg., St. Louis, Mo. About $400,000.

★Neb., Omaha—School—Bd. Educ. let contract Train School, 6th and Hickory Sts., to Houghton Sons & Ansell, $50,000.

★S. D., Rapid City—High School—School Bd. let contract to H. N. Leighton Co., 127 South 10th St., $78,965.

★Mont., Deer Lodge—High School—Bd. Educ. let contract, brick and stone, to Barclay & Murphy, Butte, $53,480.

★Cal., Oakland — Mausoleum — Pacific Mausoleum Co. let contract to Orange Co. Engr. & Constr. Co., Santa Ana, $100,000.

★Que., Montreal—Theatre—J. S. Jacobs, Jacobs Bldg., let contract to Gilletz & Co., 206 Urbain St. About $55,000.

FEDERAL GOVERNMENT WORK

Proposed Work

N. Y., New York—Dredging—U. S. Engr. Office, 710 Army Bldg., 39 Whitehall St., rejected bids, Harlem River. Noted Apr. 5.

Tenn., Athens—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., rejected bids. Noted May 24.

Minn., Duluth—Dredging—U. S. Engr. Office, Duluth, rejected bids, Duluth-Superior Harbor. Noted May 31.

Mo., St. Louis—Levee Work—Mississippi River Comn., 1311 International Life Bldg., rejected bids constructing about 259,100 cu.yds. earth work in Sny Island Levee, D.D. Noted May 3.

Tex., Dallas—Iron and Steel—U. S. Engr. Office, Dallas, rejected bids, Apr. 30, furnishing iron and steel for Lock and Dam No. 3, Brazos River. Noted Apr. 5.

BIDS DESIRED

Mass., Boston—Storehouse—Until June 11 by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., rein.-con. storehouse at Navy Yard. Noted May 17.

N. Y., New York—Dredging—Until June 14 by U. S. Engr. Office, Room 710, Army Bldg., 39 Whitehall St., dredging Hudson River Channel, New York Harbor.

N. J., Vineland—Post Office—Until June 27 by J. A. Wetmore, superv. archt., treas. dept., Wash.

N. C., Chapel Hill—Post Office—Until June 15 by J. A. Wetmore, superv. archt., treas. dept., Wash.

N. C., Wash Woods—Coast Guard—Until June 16 by Navy Dept., U. S. Coast Guard Headquarters, Wash., for Coast Guard Station No. 166; advertised in this issue.

Fla., Pensacola—Observation Tower—Until June 11 by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., for erection at Navy aeronautic station (postponed from May 21). Noted May 10.

Ill., Hoopeston—Post Office—Until July 12 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Mo., Butler—Post Office—Until June 22 by J. A. Wetmore, superv. archt., treas. dept., Wash.; advertised in this issue.

Ark., Prescott—Post Office—Until June 28 by J. A. Wetmore, superv. archt., treas. dept., Wash.

Tex., San Antonio—Nurse Corps Dormitory—Until June 11 by Constr. Quartermaster, Ft. Sam Houston, for construction at Ft. Sam Houston.

Wash., Bremerton—Dock—Until June 25 by Bureau Yards and Docks (F. R. Harris, ch.), Navy Dept., Wash., shipbuilding dock at Puget Sound Navy Yard.

Cal., San Francisco—Lumber—Until June 16 by Depot Quartermaster, U. S. Army, Ft. Mason, San Francisco, furnishing 297,000 ft. lumber at Ft. Mason.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

Conn., New London—Wharf—U. S. Coast Guard, Wash., received bids pile and timber wharf at Coast Guard Academy from A. Scott Co., 292 Pequot Ave., New London, $14,930, time 90 days; Robins-Ripley Co., New York City, $14,452, time Sept. 30. Noted May 10.

★Mass., Boston—Coal Weighers—Bureau Yards and Docks, Navy Dept., Wash., let contract, furnishing at Navy Yard, to R. H. Beaumont Co., $9200. Noted May 31.

Mass., Southbridge—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids, (a) limestone, (b) sandstone, from J. J. Roberts, 4 Wall St., Worcester, (a) $77,421, (b) $78,208; W. H. Fissell Co., 328 Bway., New York City, (a) $86,329, (b) $90,329; H. Ball, Southbridge, (a) $79,360. Noted Apr. 26.

Pa., Berwick—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids from Hagen Lumber Co., Mill St., Scranton, $44,913; Berwick Lumber & Supply Co., Berwick, $49,650; B. F. Caviston, Carbondale, $54,000. Noted Apr. 26.

★Pa., Phila.—Storehouse—Bureau Yards and Docks, Navy Dept., Wash., let contract to Industrial Engr. Co., 30 Church St., New York City, $508,175. Noted May 31.

★Md., Indian Head—Foot Bridge—Bureau Yards and Docks, Navy Dept., Wash., let contract, erecting at Naval Proving Ground, to Ketler Elliott Erection Co., $35,253. Noted Apr. 26.

Wash., D. C.—Bridge Dist. Comrs., Dist. Bldg., received bids 7-span steel plate girder highway bridge on Bennings Rd., (a) excavation, (b) filling in approach walls, (c) filling for low level roads, (d) paving on low level roadway, (e) approaches, abutments and piers, (f) bridge, from Snare & Triest, Woolworth Bldg., New York City, (a) 70c., (b) $1, (c) $1, (d) $1.25, (e) $73,500, (f) design a, $85,000, design b, $78,000, asphalt paving on bridge and approaches $1.50 per sq.yd. concrete base for paving on approaches $1 per sq.yd.; concrete in walls, $10.70 per cu.yd.; concrete in bridge $14; concrete jacketing on bridge and piers, $20 per cu.yd.; concrete in abutments and piers, $8.30 per cu.yd.; reinforcing steel in bridge, 5c. per lb.; structural steel in bridge, etc., 6.5 per lb.

Wash., D. C.—School—Dist. Comrs., Dist. Bldg., received bids addition to School No. 170, from Skinker & Garrett, 1416 F St., $48,340, alternate A, add $40, B add $1560, C deduct $10, D add $2200; Melton Constr. Co., Real Estate Trust Bldg., $39,995, alternate A, add $50, B add $1310, C add $188, D add $2886; W. E. Mooney, Evans Bldg., $49,529, no alternate proposition. Noted May 24.

Wash., D. C.—Towers—Bureau Yards and Docks, Navy Dept., received bids constructing 3 600-ft. steel towers at Naval Radio Station, El Cayey, P. R., from Milliken Bros., Inc., Milliken, S. I., New York; U. S. Steel Products Co., 30 Church St., New York City, Pittsburgh-Des Moines Steel Co., 400 Ross St., Pittsburgh Penn Bridge Co., Bond Bldg., P. J. Carlin Constr. Co., 1123 Bway., New York City; McClintic-Marshall Co., 1421 Chestnut St., Phila.; Hamilton & Chambers Co., 29 Bway., New York City. Noted May 10.

Va., Norfolk—Traveling Cranes—Bureau Yards and Docks, Navy Dept., Wash., received bids furnishing for foundry for Navy Yard, from Cleveland Crane & Engr. Co., Wickliffe, O.; Penn Bridge Co., Bond Bldg., Wash., D. C.; Whiting Foundry & Equipment Co., Harvey, Ill.; Niles-Bement-Pond Co., 111 Bway., New York City. Noted May 24.

Ala., Jasper—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., received bids (a) limestone, (b) sandstone, from A. Blair, Hill Bldg., Montgomery, (a) $94,159; W. H. Fissell & Co., 1328 Bway., New York City, (a) $115,900, (b) $113,900. Noted Apr. 26.

Wis., La Crosse—Heating System—J. A. Wetmore, superv. archt., treas. dept., Wash., received low bids heating system in post office, from Noland-Clifford Co., Newport News, Va., $8496; W. Wilby, Selma, Ala., $8750; Baker-Niebuhr Co., La Crosse, $9037. Noted May 24.

★**Kan., Girard**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. D. Lovell, 1415 8th St., S. E., Minneapolis, $47,875. Noted May 31.

★**Tex., El Paso**—Post Office—J. A. Wetmore, superv. archt., treas. dept., Wash., let contract to W. H. Maxwell, Lakeside, $283,890. Noted May 31.

Wash., Bremerton — Cranes — Bureau Yards and Docks, Navy Dept., received bids, May 28, furnishing 4 15-ton travelling, revolving, hammer-head shipbuilding cranes for delivery at Puget Sound Navy Yard: (a) price for 4 cranes, delivered and erected complete; (b) same with bidder's modification in design; (c) deduct for omitting 1 crane from (a); (d) deduct for omitting 1 crane from (b); E. F. Perry Mfg. Co., Grand Central Terminal Bldg., New York City, (b) $232,000, 380 days, (d) $57,500, 30 days; McMyler Interstate Co., Stop 27, A. B. C. Electric Ry., (b) $230,727, 310 days, (d) $55,540; Penn Bridge Co., Bond Bldg., Wash., D. C., (a) $274,792, (c) $51,652, 12 months. Noted May 17.

MISCELLANEOUS

Proposed Work

Dam—Westville, Conn.—See "Reinforced Concrete."

Garbage Incinerator—Long Island City, N. Y.—City has had plans prepared, Hopkins Ave., near Pierce Ave. About $55,000.

Refrigerating Equipment—Thiells, N. Y.—(Official)—F. A. Vanderlip, pres. bd. mgrs. Letchworth Village, 7 Wall St., New York City, rejected bids. Noted May 17.

Sprinkling Carts—Asbury Park, N. J.—City Comn. plans to purchase 8 motor-propelled street sprinkling carts. About $20,000. H. B. White, clk.

Garbage Disposal Plant—Newark, N. J.—Bd. Works will purchase site on Ave. A and Vanderpool St. to build plant of 300 tons daily capacity. About $400,000.

Park—Morrisville, Pa.—Boro. plans to build. L. R. Bond, boro. solicitor.

Lumber Docks, etc.—Baltimore, Md.—Weyerhaueser Timber Co., Tacoma, Wash., purchased 50-acre site on Anne Arundel Co. shore of Patapsco River, and plans docks, sheds and dredge channel for handling lumber shipped from Tacoma by way of Panama Canal to Baltimore.

Transmission Line—Laurinburg, N. C.—Palmetto Power & Light Co. plans, from here to point on Wateree River, about 7 mi. from Camden, to receive power from Wateree Power Co. Preliminary surveys being made. C. E. Johnson, pres.

Oil Station—Charleston, S. C.—Gulf Refining Co., Frick Annex, Pittsburgh, purchased 17 acres on Cooper River, and plans oil station, including storage tanks, piers, wharves, etc.

Elimination Grade Crossings—Columbus—Ohio—Cleveland & Mahoning Valley R.R. plans to issue $2,851,800 preferred stock for improving grade crossings. R. T. Sullivan, Youngstown, mgr. rys.

Park Improvements—Toledo, O.—City will sell $50,000 bonds, June 20, for park improvements. W. Steward, dir. finance.

Retaining Walls—Kankakee, Ill.—Momence Twp. will soon let contract 2 retaining walls, 1 180-ft. to protect Forberger Bridge and 1 60-ft. for Hayhurst Bridge.

Transmission Line—Centerville, Ia.—Centerville Light & Traction Co. purchased several small central station companies in vicinity of Centerville and will erect 13,200-volt transmission line to connect them with power station. F. S. Payne, pres. and mgr.

Dam—Rochester, Minn.—City voted $650,000 bonds to build water power dam to furnish electricity for city. M. G. Holmes, supt.

Transmission Line—Vinland, Kan.—City plans to obtain electric power from municipal plant at Baldwin, 5-mi.

Park—Dillon, Mont.—Company being organized to construct amusement park here. About $50,000.

Park Improvements—Tulsa, Okla.—See "Streets and Roads." Noted Apr. 26.

Subway—Denver, Colo.—City and Union Pacific R.R. plan, on 38th St. H. F. Merryweather, city engr., R. L. Huntley, 15th and Dodge Sts., Omaha, Neb., ch. engr.

Seawall—Seattle, Wash.—City plans on Railroad Ave., from Madison to Pike Sts., including filling, planking, etc. About $250,000. A. H. Dimock, city engr.

Wharf—Seattle, Wash.—See "Industrial Works."

Port Improvements—Vancouver, Wash.—City voted in favor of plans for port improvements, including extension of 11th St., fill, and sidetracks. B. L. Dorman, city engr.

Transmission Line—Marshfield, Ore.—Oregon Power Co. will construct extension, from Marshfield to Coquille. About $25,000. A. L. Martin, mgr.

Shipways—Warrenton, Ore.—See "Industrial Works."

Steam Shovels, etc.—El Centro, Cal.—See "Excavation and Dredging."

BIDS DESIRED

Timber Groynes—Brooklyn, N. Y.—Until June 14 by C. Ward, pres. dept. parks, Municipal Bldg., repairs to 6 timber groynes at Dreamland Park, Coney Island.

Docks—Buffalo, N. Y.—Until June 12 by Comr. Pub. Wks., Room No. 3, Municipal Bldg., improving along Bird Island Pier, about 1000 ft. rock filled timber crib to be placed in strong current of Niagara River, crib surmounted with concrete block and mass concrete wall; extension of about 600 ft. 8½-ft. submerged sewer of concrete or wood stave pipe in rear of such wall; construction of about 70 ft. similar crib dock on harbor side of such pier and of about 130-ft. wood pile dock with rein.-con. top.

Incinerator Plant—New York, N. Y.—Until June 11 by M. M. Marks, boro. pres., for labor and materials required for installing refuse incinerator plant in Washington Market building, Fulton, West, Vesey and Washington Sts.

Pipes, etc.—New York, N. Y.—Until June 11 by R. Adamson, fire comr., furnishing, delivering and installing subsidiary pipes and upper parts of fire alarm posts and delivering and installing twin posts and bases for fire alarm posts for Bronx Improv.

Cedar Railing, etc.—Atlantic City, N. J.—Until June 13 by Bd. Freeholders, for furnishing 5700-ft. cedar railing and mid rail lengths and 235 posts for Tuckahoe River bridge. A. H. Nelson, co. engr.

Cement, etc.—Newton, N. J.—Until June 12 by Town Com. for furnishing 2600 bbls. Portland cement, 6000 sq.yds. reinforcement, 600 tons sand and 4200 ft. elastite. H. Snook, engr.

Chimney—Sibley, Ia.—See "Reinforced Concrete."

Dikes—Topeka, Kan.—Until June 15 by Pub. Utilities Comn. for 1 pile and stone dike and 1 earth dike, on south bank of Kansas River on State Hospital grounds. T. J. Strickler, engr.

Harbor Improvements—Newport, Ore.—(Official)—Until June 25 by County, improving Bar Harbor, jetties, dredging, etc. About $836,000. Noted May 17.

PRICES AND CONTRACTS AWARDED

(★Indicates award of contract)

★**Elimination Grade Crossings—Buffalo, N. Y.**—Lehigh Valley R.R. let contract, Tifft St. and Hamburg Turnpike to Peckham Constr. Co., Buffalo.

★**Pier and Shed—Clifton, S. I., N. Y.**—(Official)—Staten Island Development Corp. let contract to Anderson & Wheeler, Inc., West New Brighton, S. I., $325,000.

Tracks—New York, N. Y.—Pub. Ser. Comn. 120 Bway. received low bids installing tracks for Pelham line from Terry & Tench, Grand Central Terminal, $375,000 and Kauffman & Garcey, 51 Chambers St., $394,782. These are unofficial totals. Noted May 24.

★**Bulkhead and Platform—Port Ivory, S. I., N. Y.**—(Official)—Proctor & Gamble Mfg. Co., 100 Broad St., New York City, let contract, in connection with improvements to Port Ivory plant, to Anderson & Wheeler, Inc., West New Brighton, S. I., $45,000.

Dock Wall—Troy, N. Y.—(Official)—Harbor & Dock Comn., City Hall, received low bid from Great Lakes Dredge & Dock Co., 27 Lumber Dist., Albany, $380,828. Noted May 17.

★**Coaling Tower—Chicago, Ill.**—Swift & Co., Union Stock Yards, let contract, Exchange and Justine Sts., to W. G. Nelson, 35 South Dearborn St., $17,000.

★**Fill—Chicago, Ill.**—(Official) — Pittsburgh, Cincinnati, Chicago & St. Louis Ry. let contract about 600,000 cu.yds. sand filling in connection with elevation of tracks between 49th and 75th Sts., to P. T. Clifford & Son, Valparaiso, Ind.

Retaining Wall—St. Paul, Minn.—See "Streets and Roads."

★**Tunnel—Jerome, Ariz.**—United Verde Extension Mining Co. let contract drainage and haulage tunnel to Potter Constr. Co., $500,000.

★**Fill—Tacoma, Wash.**—Co. Comrs. let contract making fill on 11th St. to Tacoma Dredging Co., Tacoma, $81,225.

★**Wharf, etc.—Oakland, Cal.**—Howard Co. let contract wharf and warehouse to Tibbits-Pacific Co., 16 California St., San Francisco, $65,000.

★**Concrete Lining—San Rafael, Cal.**—See "Reinforced Concrete."

Railway Extension in Mexico on a large scale is projected by the Department of Communications and Public Works. The line on the Isthmus of Tehuantepec will be extended from Santa Lucretia to Merida, Yucatan. This project forms the connecting link in the line from Ciudad Juarez, on the American border, to Merida, Yucatan will finance the new line in conjunction with various electric lines connecting with it. The right-of-way formerly was controlled by a concession to foreign capital, but the concession was declared forfeited, as the holders failed to complete the work according to its terms. Another projected line will connect the Atlantic and Pacific coasts, traversing the country from Tampico to San Blas. The Southern Pacific company has been notified that it must continue its line from Compostela to Guadalajara. At Bahia Espiritus, Quintana Roo, a deep-water harbor is to be made at a cost of $5,000,000 gold. A railway outlet will be provided by a 100-mi. extension of the United Railroads of Yucatan.

The Army Mobilization Camps to be equipped by the U. S. Government will include the following: Each camp will consist of 2000 1- and 2-story frame buildings, water and sewage systems, roads and walks, lighting systems and plants, refrigerating plants, sterilizing plants, construction of temporary buildings required for shelter of troops, animals and supplies, $40,500; temporary hospitals, $2,125,000; water and sewer systems, $2,500,000; electric lighting system, $605,000; roads, drainage and clearing, $5,040,000; construction and repairs of target ranges, $2,015,000; disposal of garbage, $3,250,000; ice boxes for preservation of food, $270,000; 98,700 water closet outfits, 15,000 lavatory outfits, 70,000 shower outfits, 28,000 urinal outfits, 6,000,000 ft. wrought iron pipe, 15,000 sinks, 400,000 lbs. fittings, 1,321,000 ft. c.-i. soil pipe, 3,346,000 lbs. fittings, 18,660 galvanized urinal troughs, 613,000 sacks cement, 65,000 cu.yd. sand, 112,000 cu.yd. crushed stone or gravel, 55,000 lb. white lead, 211,000 lb. oakum, 7,000,000 lbs. nails, 230,892 doors, 232,892 locks, 30,240 ft. square wire screen, 729,000 ft. galvanized iron pipe, 210,000 ells, 209,000 hooks, 69,000 iron shower heads, 69,000 brass stop compression cocks, 3,200,000 vitrified sewer pipe, 652,000 6-light window glass, 1000 door hangers, 91,000 chimney flues, 468 combination motor driven engines, 926 hose reels, 468,000 ft. linen fire hose, 38,000 fire extinguishers, 76,000 fire axes, 153,000 fire buckets, 91,000 chimney caps, electric lighting material and supplies, 2,211,000 ft. copper wire, 100,000 lamps, Mazda, 85,000 each lamp sockets, rosettes, tin shades, 4500 gross cots, bedding, etc., 1,200,000 rolls roofing paper, 108 ft. each, 500,000,000 ft. lumber, water tanks. Thus far the following sites for the camps have been selected: Ayer, Mass., El Paso, Tex., American Lake, Wash., Augusta, Ga., Columbia, S. C., Chickamauga Park, Ga., Greenville, S. C., Ft. Sam Houston, Tex., Atlanta, Ga., 1st camp, Atlanta, Ga., 2nd camp, Manorville, L. I., Wrightstown, N. J.

Charles A. Schieren Co., New York, have opened branch offices at 72 Congress St., W., Detroit, Mich.; 18 South Bway., St. Louis, Mo.; 475 South Main St., Memphis, Tenn.; 272 Marietta St., Atlanta, Ga.

Cement Products Exhibition Co., 210 South La Salle St., Chicago, Ill., have elected the following officers for the ensuing year: B. F. Affleck, Pres., William Dickinson, Vice Pres., Blaine S. Smith, Secy., E. L. Cox, Treas.

IDAHO VOTES MILLION FOR ROADS

Governor Alexander of Idaho has signed the road bill of that state, and almost a million dollars is to be expended in the next two years on the road from Moscow through Lewiston, to Weiser and southern Idaho, a connection with the transcontinental highway to Portland and Seattle. Under the Post Roads bill the United States Government will appropriate $150,000 for the road, the state will provide $375,000, and the balance will be furnished by the counties. For the highway from Montana to Lewiston, which will connect with the automobile highway to Portland and Puget Sound, Idaho has appropriated $30,000, the Forestry Department $30,000, and the counties $30,000.

ROAD BIDS REJECTED ON ACCOUNT OF EXCESSIVE PRICES

Upon the recommendation of Chief Engineer Uhler, Frank B. Black, state highway commissioner, rejected all bids received by the Pennsylvania State Highway Department, May 3, for the construction of improved roads in Allegheny, Cambria, Dauphin and Washington Counties. The prices bid were excessively high, even in view of the present scarcity of labor and increased cost of materials. Commissioner Black announced that all of these sections of road would be readvertised immediately, as well as the section of road in Clarion County for which no bids were received on May 3. It is the intention of the Highway Department to rush road construction throughout the state as appropriations become available, especially on the main-traveled routes.

Asbestos Protected Metal Co., First National Bank Bldg., Pittsburgh, Pa., has closed its Atlanta and St. Louis offices temporarily due to the fact of the managers entering the Officers' Reserve Corps. All communications should be addressed to the home office.

Gaston, Williams & Wigmore have moved their offices to Equitable Bldg., 120 Bway., New York City.

Wagner Electric Mfg. Co., St. Louis, Mo., has appointed E. T. Coup to take charge of its office in the First National Bank Bldg., Milwaukee, Wis.

Weiss Instrument Co. have moved their offices to 1731 Arapahoe St., Denver, Colo.

M. F. Williams, 925 Sheridan Ave., Detroit, Mich., has been appointed district representative for the distribution of the electromobile industrial trucks and tractors manufactured by Orenstein-Arthur Koppel Co., Koppel, Pa.

TRADE CATALOGS

"The Ideal Drive for Cement Mills." Link-Belt Co., 39th St. and Stewart Ave., Chicago, Ill. Booklet No. 253; pp. 12; 6 x 9 in.; illustrated. This describes installation of the Link-Belt silent chain at the plant of the Nazareth Cement Co.

Link-Belt Silent Chain. Link-Belt Co., 39th St. and Stewart Ave., Chicago, Ill. Data Book No. 125; pp. 128; 6 x 9 in.; illustrated. Contains information and tables presented in such form that engineers and power users may select their own drives and determine their cost.

"Chlorination at Dunwoodie." Wallace & Tiernan Co., Inc., 137 Centre St., New York. Technical Publication No. 8; pp. 8; 7 x 10 in.; illustrated. This is reprint of an article by T. D. L. Coffin from "Engineering News" of Sept. 7, 1916.

Concrete Mixers, Hoists, Trench Pumps, Etc. Waterloo Cement Machinery Corp., Waterloo, Ia. Catalog; pp. 48; 7 x 10 in.; illustrated.

Concrete Mixers, Pavers, Hoists, Etc. Lansing Co., Lansing Mich. Catalog No. 17C; pp. 48; 8 x 10 in.; illustrated.

Corr-Mesh for Fireproof Construction. Corrugated Bar Co., Buffalo, N. Y. Catalog; pp. 56; 6 x 9 in.; illustrated.

General Electric Company, Schenectady, N. Y. Bulletin 48,702, listing Fabroil gears.

National Tank & Pipe Company, Portland, Ore. Catalog 14, devoted to redwood and Douglas-fir pipe.

John R. Roebling & Sons Company, Trenton, N. J. Bulletin on wire rope.

Link-Belt Wagon and Truck Loaders. Link-Belt Co., 39th St. and Stewart Ave., Chicago, Ill. Book No. 270; pp. 64; 6 x 9 in.; illustrated.

DAM, NEWARK, N. J.

Bids were received by Bd. St. and Water Comrs., May 3, raising dam at Oak Ridge Reservoir from (A) Hyman & Goodman Co., 15 Exchange Pl.; (B) Harrison & Craig Co., 837 Broad St.; (C) Averill-Matthews Co., 31 Clinton St.; (D) J. F. Chapman, Lyons Farms, $81,245; (E) Beaver Eng. & Contr. Co., 219 Market St., $88,756; (F) Kaufman & Garcey, $91,481; (G) L. F. Brown Co., $94,003; (H) Carrington Constr. Co., River Dr., Passaic, $96,478. The item bids of the 3 lowest bidders were as follows:

	A	B	C
6,450 cu.yd. earth excavation, 0 to 4 ft. deep	$1 00	$0 65	$0 63
150 cu.yd. earth excavation, 4 to 20 ft. deep	2 00	2 50	3 50
1,035 cu.yd. rock excavation, as shown on plan	5 00	3 00	2 15
43,500 cu.yd. borrowed earth	60	65	87
50 cu.yd. clay puddle	2 00	2 50	3 00
4,000 cu.yd. slope paving to be removed	1 00	50	75
900 cu.yd. concrete deposited without forms	6 00	8 00	6 73
3,235 cu.yd. concrete deposited in forms	7 00	9 00	7 93
3,260 lb. sheet lead	20	20	23
200 lin.ft., 6-in. agricultural tile	50	50	50
Removing and replacing deck of gatehouse (lump sum)	300 00	300 00	400 00
Furnishing and erecting stairway (lump sum)	200 00	100 00	400 00
Extended totals	$71,422	$75,540	$81,170

SEWERS, BARBERTON, O.
Contract No. 1

Bids were received by City for sewers and pumping station, Contract No. 1, from (A) Hoag & Dall, 510 Commercial Bank Bldg., Cleveland; (B) John B. McLane Co., Cincinnati; (C) W. McDowell & Sons, Cleveland. The unit bids were as follows:

	A	B	C
21,000 cu.yd. earth excavation 0–6 ft	$0 85	$0 94	$0 75
5,500 cu.yd. earth excavation 6–12 ft	1 00	1 37	2 00
800 cu.yd. earth excavation 12–18 ft	1 25	1 88	5 00
100 cu.yd. rock excavation	2 50	3 00	5 00
970 lin.ft. 4-in. vitrified pipe sewer	20	33	17
2,840 lin.ft. 6-in. vitrified pipe sewer	28	40	25
5,600 lin.ft. 8-in. vitrified pipe sewer	40	50	35
1,870 lin.ft. 10-in. vitrified pipe sewer	55	90	50
280 lin.ft. 12-in. vitrified pipe sewer	72	1 00	65
1,610 lin.ft. 15-in. vitrified pipe sewer	1 00	1 33	85
870 lin.ft. 18-in. vitrified pipe sewer	1 31	1 79	1 25
2,380 lin.ft. 20-in. vitrified pipe sewer	1 56	2 02	1 59
8,890 lin.ft. 22-in. vitrified pipe sewer	1 96	2 14	2 00
4,580 lin.ft. 24-in. vitrified pipe sewer	2 17	2 60	2 50
6 4-in. vitrified pipe specials	63	50	75
16 6-in. vitrified pipe specials	88	75	75
16 8-in. vitrified pipe specials	1 30	1 00	1 00
60 cwt. waterproofing compound	4 50	5 00	10 00
4,120 lin.ft. 36-in. segment block sewer	3 36	4 45	3 63
4,120 lin.ft. 36-in. reinforced concrete pipe	3 42		3 63
10 10-in. vitrified pipe specials	1 84	1 60	1 50
100 tons c.-i. pipe in place	100 00	90 00	95 00
3 tons c.-i. pipe specials	150 00	150 00	140 00
2 12-in. vitrified pipe specials	2 28	2 00	2 00
29 standard MH, 0–7 ft	35 00	50 00	70 00
32 standard MH, 7–13 ft	65 00	80 00	84 00
7 standard MH, 13–19 ft	95 00	100 00	105 00
1 special MH No. 8	100 00	150 00	225 00
1 special MH No. 1	150 00	150 00	185 00
1 special MH No. 2	150 00	150 00	185 00
1 special MH No. 3	200 00	150 00	220 00
1 special MH No. 4	150 00	150 00	180 00
1 special MH No. 5	125 00	150 00	185 00
1 special MH No. 6	100 00	150 00	175 00
1 special MH No. 7	100 00	150 00	175 00
1 blow-off MH A	250 00	300 00	160 00
1 blow-off MH B	250 00	300 00	160 00
45 6-in. Y branches on 8-in. pipe	80	1 00	1 00
22 6-in. Y branches on 15-in. pipe	2 00	1 50	2 30
30 6-in. Y branches on 18-in. pipe	2 60	2 00	3 20
20 6-in. Y branches on 20-in. pipe	3 00	2 50	3 84
83 6-in. Y branches on 22-in. pipe	4 00	3 00	5 00
23 8-in. stubs in place	80	1 00	75
40 6-in. slants in place	35	1 00	75
2 6-in. stubs in place	60	1 00	65
250 lin.ft. 6-in. vitrified pipe house connections	30	1 00	50
54 6-in. vitrified pipe specials	88	1 00	75
5 cu.yd. concrete masonry, Class 1	12 00	15 00	20 00
15 cu.yd. concrete masonry, Class 2	10 00	12 00	18 00
1,030 cu.yd. concrete masonry, Class 3	8 00	9 00	15 00
10-in. stubs in place	1 10	1 00	1 00
295 cu.yd. reinforced concrete masonry	16 00	20 00	22 00
1 cu.yd. brick masonry	18 00	25 00	17 00
500 cu.yd. earth embankment	1 50	75	1 25
10 M ft.b.m. sheeting left in place	40 00	20 00	35 00
300 lin.ft. 8-in. underdrain	40	50	50
15-in. stubs in place	2 00	2 00	2 00
100 cu.yd. gravel refill	1 00	3 00	2 00
600 hours common labor	57	80	45
30 sq.yd. restoring brick roadway	2 00	2 50	2 50
200 sq.ft. restoring cement walks	25	20	20
2,600 sq.ft. restoring stone walks	20	20	05
40 lin.ft. restoring curbing	50	1 00	15
50 cu.yd. cinder filling	1 00	2 25	1 50
270 lin.ft. ¾-in. w.i. pipe	18	30	09
2,100 lin.ft. 2-in. w.i. pipe	52	55	32
Wolf Ave. sta. superstructure	1,127 00	1,874 00	900 00
Wooster Rd. sta. superstructure	900 00	1,433 00	900 00
Pumping equipment, Wolf Ave. (lump sum)	4,250 00	3,700 00	4,000 00
Ejector equipment, Wooster Rd. (lump sum)	2,000 00	2,000 00	4,000 00
Ejector equipment, Manchester Rd. (lump sum)	3,000 00	1,800 00	4,000 00
Miscellaneous metal work (lump sum)	2,000 00	1,000 00	1,500 00
10-in. stubs in place	1 45	2 00	1 25
Extended totals	$128,277	$140,988	$144,648

Buff & Buff Mfg. Co., Jamaica Plain, Boston, Mass., surveying instruments, has purchased the business of R. Seelig & Sons, 231 North 5th Ave., Chicago, Ill. Madison S. Jordan will remain in full charge of the Chicago office and R. Seelig will have charge of the shop.

Blackstone Co., Jersey City, N. J., has been incorporated to carry on a general paving business, specializing in bituminous materials and paving machinery. C. H. Jarvis, J. R. Turner and P. L. Nieser, incorporators.